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WATER SUPPLY OUTLOOK FOR MONTANA

U.S. DEPT. OF AG
MAY
RECORDS

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

MONTANA AGRICULTURAL EXPERIMENT STATION

AS OF
MAY 1, 1975

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Cover Photo: Cabins near Sacajawea Snow Course in Bridger Mountains, Montana.

SCS PHOTO 11-8480-15

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 111, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P.O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U.S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

WATER SUPPLY OUTLOOK FOR MONTANA

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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CONTENTS

MONTANA WATER SUPPLY OUTLOOK
May 1, 1975

* *
* Very little melt occurred during April and substantial *
* amounts of snow fell in the southwest. Water stored *
* in the snowpack at high elevations generally increased *
* during the past month. Low elevation snowpack is well *
* above average as a result of additional snowfall and *
* very little melt during April. On 33 courses of the *
* 203 snow courses measured near May 1, the snow water *
* equivalent is maximum of record for May 1. Of these, *
* 21 snow courses have the largest snow water equivalent *
* recorded for any month. These records are primarily *
* at low elevation snow courses. *
* *
* Streamflow during April was generally below average *
* except for above average runoff in portions of the *
* Yellowstone drainage. Streamflow for the May-September *
* period is forecast near to a little above average in *
* northwestern Montana on both sides of the divide and *
* over 130 percent of average in most southwestern *
* drainages. Most other drainages are expected to have *
* 110-130 percent of average runoff. The large amount of *
* low elevation snowpack does present a potential for *
* high runoff early in the snowmelt period. *
* *
* Early season irrigation supplies are expected to be *
* excellent in almost all drainages and generally aver- *
* age or above during the later portions of the irrigation *
* season. *
* *

COLUMBIA RIVER DRAINAGE

Snow - The mountain snowpack is generally near average in the Flathead River drainage along the Continental Divide. Water stored in the headwater areas of the Blackfoot, Clark Fork, Bitterroot, and portions of the Kootenai-Flathead River drainage West of Kalispell is generally well above average. Remaining portions of the Flathead, Lower Clark Fork, and Kootenai River drainages have above average snowpack. Many areas have an extremely heavy low elevation snowpack with some low elevation snow courses having record amounts of snow water equivalent for May 1. This includes tributaries to the Whitefish, Stillwater, and Little Bitterroot River drainages and all of the Blackfoot, Upper Clark Fork, and Bitterroot River drainages. Higher elevation snow courses are generally near or above average. Most areas in the Bitterroot, Upper Clark Fork, and Blackfoot River drainages did receive substantial increases of snow water content during April.

Streamflow - Runoff during April was below average. Streamflow for the May-September period is forecast near or a little above average in the Kootenai and Flathead River drainages, above average in the Bitterroot and Lower Clark Fork River drainages, and well above average in the Blackfoot, Upper Clark Fork, and extreme headwaters of the Bitterroot River drainage. The large low elevation snowpack does present a potential for large runoff during the early portions of the snowmelt season. Persons having equipment or livestock in or near areas that could be subject to high water should move them before spring runoff.

MISSOURI RIVER DRAINAGE

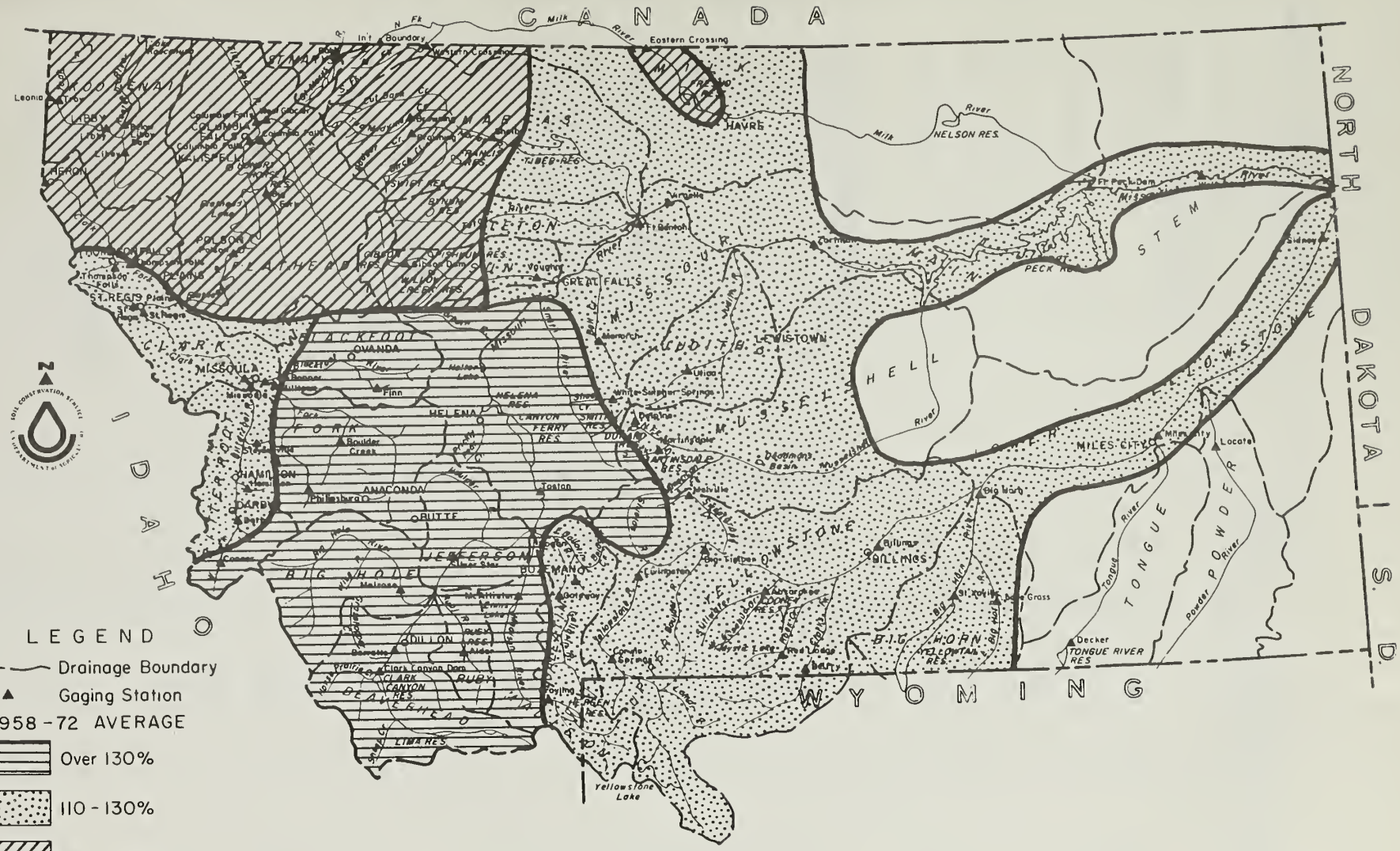
Snow - Large increases in snowpack occurred during April with very little melt swelling the low elevation snowpack to record proportions in many areas. Snowpack in the headwaters of the Marias, Sun, and Teton River drainages is generally near average. Most southwest drainages have heavy snowpack. The remaining portions of the Missouri River drainage generally have above average snowpack excepting for heavy snow accumulations in small mountain ranges such as the Highwoods, Bear Paws, Little Rockies, and Snowy Mountains.

Streamflow - Runoff during April was generally below average except for near average on the Madison River. Streamflow for the May-September period is forecast to be near average in the Sun, Teton, Marias, and Milk River drainages; well above average in the Madison, Jefferson, and streams tributary to the Missouri River above Great Falls. Above average runoff is expected in most of the other drainages in the Missouri system. The large amount of low elevation snowpack does present a potential for high runoff during the early portions of the snowmelt period. Persons having livestock or equipment in areas subject to high water should move them prior to the runoff season.

YELLOWSTONE RIVER DRAINAGE

Snow - Very little melt occurred during April with increases in snowpack measured at most snow courses. Low elevation snowpack is quite heavy for this date. Particularly heavy snowfall was noted during the month in the Crazy Mountains and in the north portion of the Bighorn Mountains.

Streamflow - Runoff during April was generally below average in the upper drainages increasing to above average below the Clark's Fork. Streamflow for the May-September period is forecast to be generally 10-30 percent above average. The low elevation snowpack does present a potential for high runoff during the early portions of the snowmelt period. Persons having livestock or equipment in areas subject to high water should move them prior to the start of runoff. Irrigation water supplies are expected to be excellent early in the irrigation season and average or above by mid-summer.



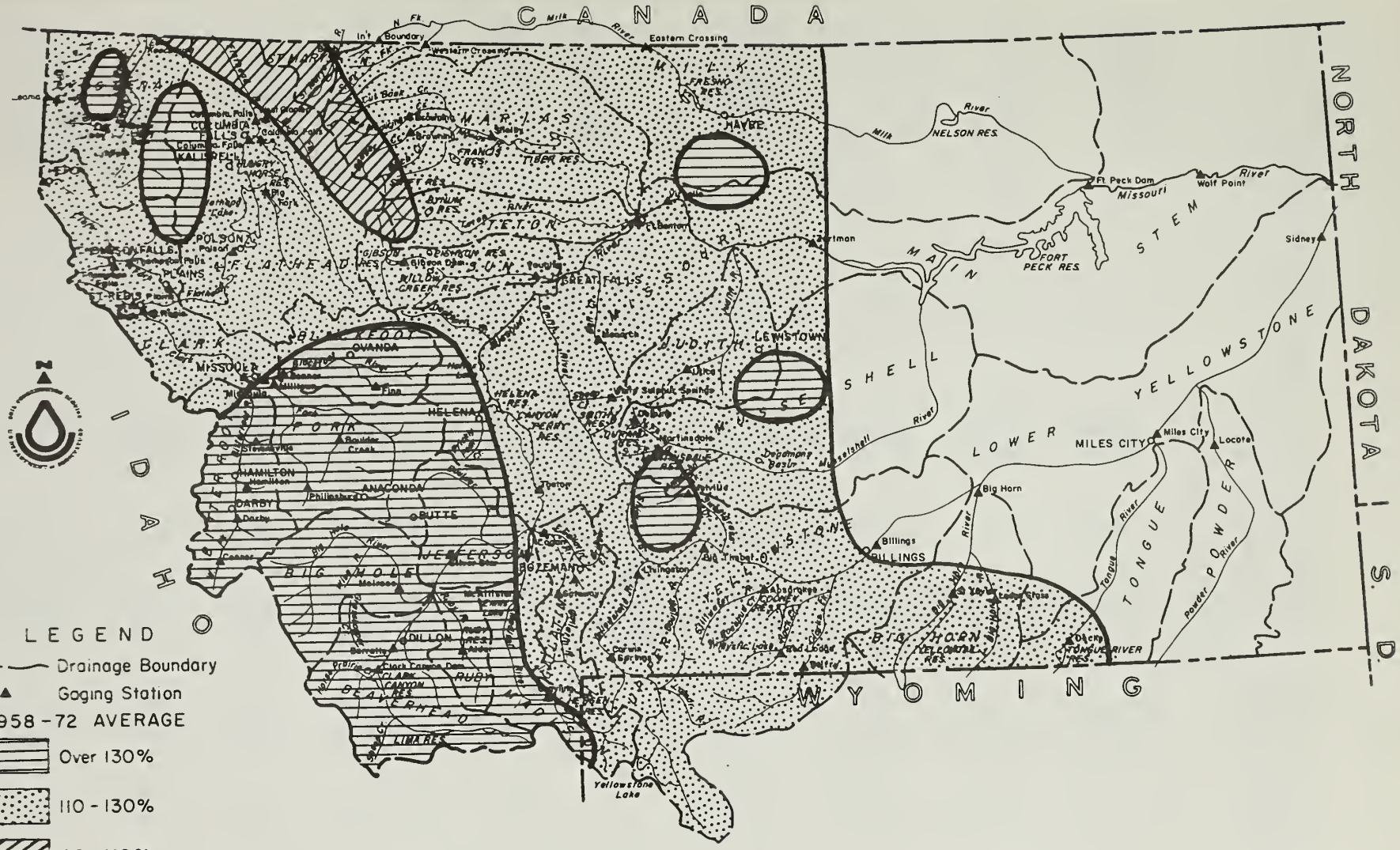
PROSPECTIVE STREAMFLOW FORECASTS
AS OF
MAY 1, 1975

M7-0-21138A-L

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF:	
		Last Year	Average
COLUMBIA RIVER DRAINAGE			
Kootenai	29	84	121
Flathead	21	85	116
Upper Clark Fork	24	152	143
Lower Clark Fork	14	91	123
Bitterroot	13	100	133
MISSOURI RIVER DRAINAGE			
Jefferson	44	122	142
Madison	20	111	135
Gallatin	13	99	119
Missouri Main Stem	12	140	137
Judith-Musselshell	14	134	125
Marias-Teton-Sun	7	116	112
Milk	3	247	155
YELLOWSTONE RIVER DRAINAGE			
Yellowstone (above Bighorn)	27	102	119
Bighorn	25	103	118
Little Bighorn	7	150	136
Tongue	12	119	121
Powder	6	195	118
SASKATCHEWAN RIVER DRAINAGE			
St. Mary's	7	88	113

U S DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE



LEGEND

Drainage Boundary

▲ Gaging Station

% 1958 – 72 AVERAGE

- Over 130%
- 110 – 130%
- 90 – 110%
- 70 – 90%
- Under 70%

MOUNTAIN SNOW WATER EQUIVALENT
AS OF
MAY 1, 1975

MONTANA

50 0 50 100
SCALE IN MILES

M7-0-211388-L

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +
COLUMBIA RIVER BASIN							
Kootenai							
Baree Trail	3800	48	7.5	4/30	6.4	6.6	6.6
Murphy Lake R.S.	3000	48	22.6	5/1	21.6	22.8	21.9
Raven	3050	48	23.0	4/30	17.1	15.6	19.1
Flathead							
Desert Mountain	5600	54	8.4	5/1	6.5	9.4	8.7
Marias Pass	5250	54	6.5	4/23	4.3	8.6	6.3
Clark Fork							
Black Pine	7100	48	10.0	4/29	7.3	8.8	7.7
Lubrecht Forest	4100	48	26.8	5/4	15.9	23.3	24.5
Seeley Lake R.S.	4030	48	11.9	5/2	11.9	11.9	11.7
Skalkaho Summit	7260	48	10.8	-	-	-	9.9
Bitterroot							
Gibbons Pass	7100	48	7.1	4/30	3.7	6.7	5.7
Lolo Pass	5250	48	10.6	4/29	5.4	9.9	7.4
MISSOURI RIVER BASIN							
Beaverhead							
Lakeview	6700	48	15.3	4/30	9.8	18.1	14.0
Madison							
West Yellowstone	6700	48	6.5	4/30	2.9	3.3	3.2
Gallatin							
Bridger Bowl	7250	48	17.0	4/28	15.9	15.1	16.1
College Site No. 2	4856	54	17.7	5/2	20.1	16.0	16.1
Lick Creek	6860	48	18.8	4/29	15.8	17.5	17.6
Twenty-One Mile	7150	48	10.0	4/30	3.4	8.8	5.1
Missouri Main Stem							
Kings Hill	7420	48	11.8	5/1	7.2	8.6	7.1
Stemple Pass	6350	48	5.9	4/30	4.1	5.4	5.0
Milk							
Beaver Creek	3950	48	20.9	4/30	14.1	11.0	16.2
Rocky Boy	4700	36	10.1	5/2	9.4	10.1	9.8
Yellowstone							
Battle Ridge	6020	48	17.6	4/28	14.4	14.0	14.8
Northeast Entrance	7350	48	9.4	4/29	4.0	6.3	7.6
PMC Dryland	3700	48	20.7	4/28	8.9	9.1	-

+ Average for period of record.

RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average
COLUMBIA RIVER BASIN					
Kootenai	Koocanusa	5,694.0	760.6	1,080.0	-
Flathead	Hungry Horse	3,428.0	1,689.0	1,522.0	2,006.0
	Flathead Lake	1,791.0	648.1	1,221.0	977.9
	Camas (4)	45.2	22.2	24.8	32.5
	Mission Valley (8)	100.3	34.1	55.7	44.0
Clark Fork	Georgetown Lake	31.0	22.1	19.1	23.1
	Lower Willow Creek	4.6	2.5	4.6	2.4
	Nevada Creek	12.6	5.3	-	10.0
	Noxon Rapids	334.6	117.3	207.6	138.4
Bitterroot	Como	34.9	-	-	19.0
	Painted Rocks	31.7	0.1	19.3	25.9
MISSOURI RIVER BASIN					
Beaverhead	Clark Canyon	328.9	140.9	164.2	148.9
	Lima	84.0	43.7	67.2	51.5
Ruby	Ruby	38.8	32.8	33.5	35.0
Madison	Hebgen Lake	377.5	228.8	200.4	212.6
	Ennis Lake	41.0	34.4	35.6	36.6
Gallatin	Middle Creek	8.0	3.3	4.2	4.5
Missouri	Canyon Ferry	2,043.0	1,268.0	1,511.0	1,552.0
	Hauser & Helena	61.9	63.0	61.9	59.3
	Lake Helena	10.4	10.9	10.4	9.6
	Holter Lake	81.9	78.6	65.9	70.6
	Smith River	10.6	9.6	5.5	8.9
	Bair	7.0	7.0	4.4	6.3
	Martinsdale	23.1	14.2	10.6	10.4
	Deadman's Basin	72.2	58.0	44.4	53.0
	Fort Peck Lake	19,140.0	16,490.0	15,930.0	13,470.0
Sun	Gibson	104.8	63.6	49.3	48.8
	Willow Creek	32.2	25.4	22.5	23.4
	Pishkun	32.0	18.1	30.9	23.1
Marias	Lower Two Medicine	11.9	-	-	-
	Four Horns	19.2	-	-	-
	Swift	30.0	12.6	14.1	20.6
	Lake Frances	111.9	38.4	44.3	84.6
	Tiber	1,347.0	553.1	549.4	611.2
Milk	Beaver Creek	3.5	2.3	0.1	-
	Fresno	127.2	123.8	72.2	106.5
	Nelson	66.8	47.5	34.9	46.8
	Lake Sherburne	66.2	21.4	20.0	20.7
Yellowstone	Mystic Lake	21.0	1.0	4.2	3.1
	Tongue River	68.0	44.2	-	35.2
	Cooney	27.4	19.5	21.0	16.7
Bighorn	Bighorn Lake	1,356.0	746.3	759.0	783.9

ASCS-SCS PORTLAND OREGON 1974 M7-0-22024-BF

Average based on 1958-72 period.

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average
COLUMBIA RIVER DRAINAGE		
Blackfoot River near Bonner	12,000 - 14,000	9,902
Clark Fork River above Missoula	21,000 - 25,000	16,531
Bitterroot River near Darby	9,000 - 11,000	6,650
Clark Fork River below Missoula	38,000 - 45,000	32,373
Clark Fork River at St. Regis	50,000 - 60,000	41,080
N. Fk. Flathead near Columbia Falls	23,000 - 26,000	23,167
M. Fk. Flathead near West Glacier	20,000 - 24,000	25,020
MISSOURI RIVER DRAINAGE		
Big Hole River near Melrose	10,000 - 11,500	8,009
Jefferson River at Silver Star	11,000 - 13,000	8,810
Gallatin River near Gateway	6,700 - 8,000	5,369
Gallatin River near Logan	7,000 - 8,500	5,324
Missouri River at Toston	24,000 - 27,000	18,005
Belt Creek near Monarch	1,500 - 2,200	1,742
Marias River near Shelby	6,000 - 7,500	12,720
S. Fk. Musselshell above Martinsdale	1,050 - 1,250	745
YELLOWSTONE RIVER DRAINAGE		
Yellowstone River at Livingston	25,000 - 28,000	20,560
Boulder River near Big Timber	5,500 - 6,500	5,100
Stillwater River near Absarokee	7,000 - 8,500	6,261
Clarks Fork River near Belfry	7,500 - 9,000	7,342
Rock Creek near Red Lodge	1,300 - 1,500	1,067
Yellowstone River at Billings	50,000 - 60,000	39,188

*Highly abnormal weather during the critical melting period may cause the peak to be outside the indicated range.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
COLUMBIA RIVER BASIN					
KOOTENAI RIVER					
Libby (near) (2)	7350	105	May-Sept	8845	6980
Below Libby Dam	6300	106	May-July	7660	5941
	4800	106	May-June	5724	4535
FISHER RIVER					
Libby (near)	258	126	May-Sept		205
	240	128	May-July		188
YAAK RIVER					
Troy (near)	530	118	May-Sept		451
	510	119	May-July		428
KOOTENAI RIVER					
Leonia (at)	8650	105	May-Sept		8262
	7550	106	May-July		7146
	5900	105	May-June		5620
FLINT CREEK					
Boulder Creek (below) (3)	77	120	May-Sept		64.2
	61	126	May-July		48.5
MIDDLE FORK ROCK CREEK					
Philipsburg (near)	89	124	May-Sept		72.2
	80	124	May-July		64.7
NEVADA CREEK					
Finn (near)	27	155	May-Sept		17.5
	25	158	May-July		16.0
BLACKFOOT RIVER					
Bonner (near)	1110	123	May-Sept		905
	1000	124	May-July		809
	870	126	May-June		688
CLARK FORK RIVER					
Milltown (above) (4)	890	131	May-Sept		681
	780	135	May-July		579
	650	136	May-June		478
CLARK FORK RIVER					
Missoula (above)	2000	126	May-Sept	1732	1586
	1780	128	May-July	1548	1387
	1520	130	May-June	1312	1167

(2) Adjusted for storage in Lake Koocanusa.
(3) Sum Flint Creek at Maxville and Boulder Creek at Maxville.
(4) Difference in observed flow Clark Fork above Missoula and Blackfoot near Bonner.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
WEST FORK BITTERROOT RIVER					
Conner (near) (5)	280	132	May-Sept		160
	192	135	May-July		149
BITTERROOT RIVER					
Darby (near)	680	128	May-Sept	666	528
	630	130	May-July	603	486
	550	130	May-June	523	423
SKALKAHO CREEK					
Hamilton (near)	65.5	122	May-Sept		53.8
	58.0	124	May-July		46.8
BURNT FORK CREEK					
Stevensville (near) (10)	40	120	May-Sept		33.3
	35	121	May-July		29.0
BITTERROOT RIVER					
Missoula (at) (6)	1660	121	May-Sept		1375
	1540	122	May-July		1260
	1340	124	May-June		1084
CLARK FORK RIVER					
Missoula (below)	3660	124	May-Sept		2961
	3320	125	May-July		2648
	2860	127	May-June		2251
ST. REGIS RIVER					
St. Regis (near)	310	120	May-Sept		259
	290	120	May-July		242
CLARK FORK RIVER					
St. Regis (at)	4700	119	May-Sept	5071	3936
	4290	122	May-July	4604	3517
	3700	123	May-June	3880	2992
NORTH FORK FLATHEAD RIVER					
Columbia Falls (near)	1930	107	May-Sept		1809
	1750	107	May-July		1631
	1450	106	May-June		1369
MIDDLE FORK FLATHEAD RIVER					
West Glacier (near)	1730	99	May-Sept	2355	1740
	1600	101	May-July	2167	1590
	1350	101	May-June	1727	1336
SOUTH FORK FLATHEAD RIVER					
Columbia Falls (near) (7)	2150	101	May-Sept	2741	2120
	2020	102	May-July	2595	1982
	1750	101	May-June	2146	1726

(5) Adjusted for storage in Painted Rocks Reservoir.
(6) Difference in observed flow Clark Fork above and below Missoula.
(7) Adjusted for storage in Hungry Horse Reservoir.
(10) Adjusted for diversion into Sunset Highline Canal.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
FLATHEAD RIVER					
Columbia Falls (at) (7)	6000	104	May-Sept	7752	5784
	5500	104	May-July	7160	5305
	4600	102	May-June	5771	4512
SWAN RIVER					
Big Fork (near)	635	102	May-Sept		622
	550	103	May-July		535
FLATHEAD RIVER					
Polson (near) (8)	7100	104	May-Sept	9155	6841
	6500	104	May-July	8532	6269
	5400	102	May-June	6876	5302
CLARK FORK RIVER					
Plains (near) (8)	12300	110	May-Sept	14387	11182
	11150	110	May-July	13166	10103
	9400	110	May-June	10634	8514
THOMPSON RIVER					
Thompson Falls (near)	255	111	May-Sept		229
	225	112	May-July		200
PROSPECT CREEK					
Thompson Falls (at)	135	116	May-Sept		116
	124	116	May-July		107
CLARK FORK RIVER					
Whitehorse Rapids (at) (9)	13500	109	May-Sept		11048
	12300	111	May-July		10012
	10400	111	May-June		8196

(7) Adjusted for storage in Hungry Horse Reservoir.
(8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.
(9) Adjusted for storage in Hungry Horse, Flathead Lake, and Noxon Rapids Reservoirs.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
MISSOURI RIVER BASIN					
BEAVERHEAD RIVER					
Grant (near) (11) (12)	175	165	May-Sept	76.8	106
	155	176	May-July	59.0	88.3
RUBY RIVER					
Alder (near)	114	135	May-Sept		84.5
	96	137	May-July		70.0
BIG HOLE RIVER					
Melrose (near)	870	131	May-Sept		665
	800	131	May-July		610
BIRCH CREEK					
Glen (near)	17.4	133	May-Sept		13.1
	14.6	134	May-July		10.9
WILLOW CREEK					
Harrison (near)	25.5	152	May-Sept		16.8
	23.0	154	May-July		14.9
MADISON RIVER					
Grayling (near) (13)	520	122	May-Sept	546	425
	410	128	May-July	426	319
MADISON RIVER					
McAllister (near) (14)	960	131	May-Sept	922	734
	760	136	May-July	737	558
GALLATIN RIVER					
Gateway (near)	620	122	May-Sept		507
	530	126	May-July		422

(11) Adjusted for storage in Lima Reservoir.
(12) Adjusted for storage in Clark Canyon Reservoir.
(13) Adjusted for storage in Hebgen Lake.
(14) Adjusted for storage in Hebgen and Ennis Lakes.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
HYALITE CREEK					
Bozeman (near) (15)	53.0	128	May-Sept		41.5
	46.5	131	May-July		35.5
GALLATIN RIVER					
Logan (at)	655	130	May-Sept		505
	565	134	May-July		420
MISSOURI RIVER					
Toston (at) (16)	2900	138	May-Sept	2355	2104
	2515	141	May-July	2024	1781
SHEEP CREEK					
White Sulphur Springs (near)	23.3	119	May-Sept	25.2	19.5
	20.0	119	May-July	21.8	16.8
SUN RIVER					
Gibson Dam (at) (17)	540	97	May-Sept	586	556
	490	97	May-July	530	507
BELT CREEK					
Monarch (near)	135	117	May-Sept		115
	125	119	May-July		105
MISSOURI RIVER					
Fort Benton (at) (18)	4200	130	May-Sept		3227
	3600	135	May-July		2660
TWO MEDICINE CREEK					
Browning (near) (19)	225	100	May-Sept		226
	220	103	May-July		213
BADGER CREEK					
Browning (near)	114	96	May-Sept		119
	98	96	May-July		102
MARIAS RIVER					
Shelby (near) (20)	505	104	May-Sept	496	486
	490	105	May-July	460	464

(15) Adjusted for storage in Middle Creek Reservoir.
(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
(17) Adjusted for storage in Gibson Reservoir and diversions.
(18) Adjusted for storage in Canyon Ferry Reservoir.
(19) Adjusted for storage in Two Medicine Reservoir and diversions into Two Medicine Canal.
(20) Adjusted for storage in Two Medicine, Four Horns, Lake Frances, and Swift Reservoirs.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
MISSOURI RIVER					
Virgelle (at) (21)	4950	130	May-Sept	3799	
	4250	133	May-July	3199	
SOUTH FORK JUDITH RIVER					
Utica (near)	16.0	115	May-Sept	13.9	
	15.0	118	May-July	12.7	
MISSOURI RIVER					
Landusky (near) (21)	5300	128	May-Sept	4150	
	4600	131	May-July	3512	
NORTH FORK MUSSELSHELL RIVER					
Delpine (near)	6.5	127	May-Sept	5.1	
	5.4	129	May-July	4.2	
SOUTH FORK MUSSELSHELL RIVER					
Martinsdale (above)	61	137	May-Sept	44.5	
	58	139	May-July	41.7	
MISSOURI RIVER					
Fort Peck Dam (below) (22)	5000	127	May-Sept	3936	
	4400	129	May-July	3407	
MILK RIVER					
Eastern Crossing (at)	225	102	May-Sept	221	
MISSOURI RIVER					
Wolf Point (near) (22)	5300	129	May-Sept	4105	
	4700	132	May-July	3567	
MISSOURI RIVER					
Williston, N.D. (near) (29)	13400	129	May-Sept	10352	
	11800	134	May-July	8787	
SASKATCHEWAN RIVER BASIN					
ST. MARY RIVER					
Babb (near) (30)	496	106	May-Sept	466	
	430	108	May-July	399	

(21) Adjusted for storage in Canyon Ferry and Tiber Reservoirs.
(22) Adjusted for storage in Canyon Ferry, Tiber, and Fort Peck Reservoirs.
(29) Adjusted for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill, Boysen, and Yellowtail Reservoirs. Sum Yellowstone River near Sidney and Missouri River near Culbertson.
(30) Adjusted for storage in Lake Sherburne.

Average based on 1958-72 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average
YELLOWSTONE RIVER BASIN					
YELLOWSTONE RIVER					
Corwin Springs (at)	2330	122	May-Sept	2615	1915
	1940	123	May-July	2231	1581
YELLOWSTONE RIVER					
Livingston (near)	2750	124	May-Sept		2212
	2290	126	May-July		1821
BOULDER RIVER					
Big Timber (at)	425	115	May-Sept		367
	400	118	May-July		338
STILLWATER RIVER					
Absarokee (near) (25)	680	119	May-Sept		571
	580	122	May-July		474
CLARKS FORK RIVER					
Belfry (near)	655	112	May-Sept		585
	590	112	May-July		524
ROCK CREEK					
Red Lodge (near)	130	120	May-Sept	136	108
	100	122	May-July	114	81.7
YELLOWSTONE RIVER					
Billings (at)	5000	124	May-Sept	5183	4016
	4310	127	May-July	4392	3383
BIGHORN RIVER					
St. Xavier (near) (26)	2050	119	May-Sept		1724
	1950	123	May-July		1580
LITTLE BIGHORN RIVER					
Lodgegrass (near) (28)	160	120	May-Sept		132
	140	122	May-July		115
YELLOWSTONE RIVER					
Miles City (at) (27)	7300	123	May-Sept		5931
	6450	126	May-July		5108
YELLOWSTONE RIVER					
Sidney (near) (27)	7800	127	May-Sept		6138
	7000	130	May-July		5367

(25) Adjusted for storage in Mystic Lake.
(26) Adjusted for storage in Buffalo Bill, Boysen, Bull Lake, and Yellowtail Reservoirs.
(27) Adjusted for storage in Buffalo Bill, Boysen, and Yellowtail Reservoirs.
(28) Sum Little Bighorn below Pass Creek and Lodgegrass Creek near Wyola.

Average based on 1958-72 period.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
ABUNDANCE LAKE	8800	5/02	88	30.8	32.4	23.0
AMBROSE	6480	5/01	64	20.4	14.8	13.9
ARCH FALLS	7350	4/29	64	20.5	18.4	16.2
BALD EAGLE PEAK	5700	5/02	161	73.7	92.8	69.3
BALD RIDGE	7500	4/29	67	20.0	11.0	14.6
BANFIELD MOUNTAIN	5600	5/05	66	32.1	37.2	23.7
BANFIELD MOUNTAIN PILLOW	5600	5/05	SP	28.0	32.0	20.9
BAREE CREEK	5500	4/29	130	61.4	74.3	49.6
BAREE MIDWAY	4600	4/29	105	47.8	50.9	35.1
BAREE TRAIL	5800	4/30	24	10.3	1.6	1.2
BASSOO PEAK	5150	5/01	33	14.0	6.8	8.5
BATTLE RIDGE	6020	4/28	34	11.3	.0	5.4
BEAR BASIN	8150	4/30	92	30.6	32.3	24.9
BEAR MOUNTAIN (ID)	5400	5/01	161	71.5	118.0	68.8
BEAR PAW SKI AREA	5200	5/02	47	13.5	.0	7.2
BERRY MEADOW	7000	4/28	53	15.2	6.2	9.2
BIG COULEE	5100	4/30	42	12.8	2.7	-
BIG CREEK	6750	4/30	124	50.9	73.3	54.5
BIG SKY M.V.	7450	4/30	61	20.7	25.8	-
BIG SNOWY	7150	5/01	90	32.6	27.6	24.9
BIG SPRINGS (ID)	6500	4/30	64	24.2	23.3	-
BLACK BEAR	7950	5/01	121	51.0	66.6	-
BLACK BEAR PILLOW	7950	5/01	SP	45.4	63.9	-
BLACK CANYON (ID)	7850	4/29	107	43.4	52.0	-
BLACK MOOSE (ID)	8120	4/29	124	52.8	59.8	-
BLACK PINE	7100	4/29	67	19.1	17.8	14.3
BLACK PINE PILLOW	7100	4/29	SP	22.0	15.7	15.2
BLOODY DICK	7600	4/30	63	20.3	16.0	14.2
BOTS SOTS	8000	5/01	42	13.7	11.4	-
BOULDER MOUNTAIN	7950	4/28	77	26.7	31.1	22.2
BRANHAM LAKES	8850	5/01	109	40.6	46.0	36.6
BRIDGER BOWL	7250	4/28	78	31.1	38.4	35.1
BRIDGER BOWL PILLOW	7250	4/28	SP	29.6	36.5	34.0
BRISTOW CREEK	5900	5/05	16	8.3	.0	2.3
BRUSH CREEK TIMBER	5000	4/29	32	11.9	9.6	8.2
BULL MOUNTAIN	6600	5/01	41	11.4	.0	-
CABIN CREEK	5200	5/01	21	5.6	2.6	2.2
CALL ROAD	8050	5/01	64	19.6	16.7	13.9
CALVERT CREEK	6450	4/29	52	16.6	11.8	9.2
CAMP MISERY	6400	4/30	136	56.8	88.0	52.3
CAMP SENIA	7890	5/01	40	11.4	10.7	9.8
CANYON (WY)	7750	4/30	48	18.2	20.0	16.0
CARROT BASIN	9000	5/01	121	50.5	54.8	43.4
CARROT BASIN PILLOW	9000	5/01	SP	33.2	41.4	-
CEDAR GROVE	4100	5/02	32	13.6	12.1	6.8
CHESSMAN RESERVOIR	6200	4/30	42	11.5	.0	2.5
CLOVER MEADOW	8600	5/01	83	29.2	24.5	20.8
COLE CREEK	7850	4/30	77	26.4	20.0	-

Average based On 1958-72 period. A - Aerial observation; water content estimated.
SP - Snow Pillow observation; water content only.

SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	Elevation	THIS YEAR Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (inches) Last Year	Average
COLE CREEK PILLOW	7850	4/30	SP	24.2	-	-
COLLEY CREEK	6300	4/30	50	13.7	3.9	-
COMBINATION	5600	4/29	37	9.7	1.6	5.9
COMBINATION PILLOW	5600	4/29	SP	10.4	.0	-
COOKE STATION	8150	4/30	70	24.9	24.2	22.0
COPPER BOTTOM	5200	5/02	35	12.7	2.6	-
COPPER CAMP	6950	5/02	88	35.5	39.2	-
COPPER CREEK	5700	5/02	52	18.2	9.1	12.4
COPPER LAKE CREEK	6100	5/02	81	30.5	26.8	-
COPPER MOUNTAIN	7700	4/30	69	20.8	11.0	12.5
COTTONWOOD CREEK	6400	5/02	52	15.8	-	-
COYOTE HILL	4200	4/30	25	10.5	2.0	3.5
CRYSTAL LAKE	6100	5/01	65	20.9	13.0	16.2
DAD CREEK LAKE	8400	5/02	76	23.9	19.8	17.6
DAISY PEAK	7600	4/30	46	14.4	8.6	12.4
DALY CREEK	5780	4/28	60	17.9	-	-
DARKHORSE LAKE	8600	5/02	102	41.0	39.4	29.4
DAVIS CREEK	5400	4/30	66	31.5	37.2	24.2
DEADMAN CREEK	6450	5/01	45	15.2	9.0	10.6
DEADMAN CREEK PILLOW	6450	5/01	SP	13.9	7.8	8.2
DESERT MOUNTAIN	5600	5/01	44	16.6	22.0	15.2
DEVILS SLIDE	8100	4/29	93	33.4	32.4	28.6
DISCOVERY BASIN	7050	4/30	65	18.8	-	-
DIVIDE	7800	5/01	56	17.8	12.8	11.5
DIX HILL	6400	4/30	55	16.1	2.2	-
EAST BOULDER S	9250	5/01	120	44.0	41.5	-
EAST FORK R.S.	5400	5/02	23	8.0	-	-
ELK HORN SPRINGS	7800	4/30	52	13.9	10.9	9.1
ELK PEAK	8000	4/30	77	26.2	22.6	22.1
FATTY CREEK	5500	4/30	74	29.3	36.2	25.0
FISHER CREEK	9100	4/30	126	47.2	57.2	42.4
FISHER CREEK PILLOW	9100	4/30	SP	45.5	58.7	38.9
FLEECER RIDGE	7500	5/01	56	17.2	11.4	-
FOOLHEN	8280	5/02	70	24.1	25.2	19.9
FOUR MILE	6900	5/01	40	13.6	7.4	8.8
FROHNER MEADOWS	6480	4/29	59	16.8	5.5	-
FROHNER MEADOWS PILLOW	6480	4/29	SP	16.0	8.8	-
GARVER CREEK	4250	4/30	26	11.2	6.1	5.4
GARVER CREEK PILLOW	4250	4/30	SP	10.4	6.8	5.1
GIBBONS PASS	7100	4/30	92	33.9	31.9	24.2
GOAT MOUNTAIN	7000	5/02	41	13.2	10.4	10.9
GOLD STONE	8100	4/30	79	26.1	22.9	19.4
GRASSHOPPER	7000	4/30	35	10.2	4.8	5.9
GRAVES CREEK	4300	4/29	42	18.0	23.0	16.3
GRIFFIN CREEK DIVIDE	5150	4/30	39	16.0	10.7	8.6
GRIZZLY PEAK	8400	4/30	72	25.1	20.2	21.1
HALVERSON CREEK (ID)	4850	5/01	122	56.7	-	49.7
HAWKINS LAKE	6450	4/30	94	40.5	51.5	35.4
HAWKINS LAKE PILLOW	6450	4/30	SP	36.0	51.9	33.2
HEART LAKE TRAIL	4800	5/02	69	30.2	26.4	19.0

Average based On 1958-72 period. A - Aerial observation; water content estimated.
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SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	Elevation	THIS YEAR Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (inches) Last Year	Average
HEBGEN DAM	6550	4/30	51	19.3	4.6	6.6
HELL ROARING DIVIDE	5770	5/01	88	39.2	47.7	34.3
HIGHWOOD DIVIDE	5650	4/30	46	13.5	.0	-
HIGHWOOD STATION	4600	4/30	34	9.7	.5	-
HOLBROOK	4530	4/26	25	8.7	-	1.9
HOOD MEADOW	6600	4/29	56	17.2	14.5	11.6
HOODOO BASIN	6000	5/02	137	60.8	75.2	55.2
HOODOO CREEK	5900	5/02	128	57.6	72.2	52.2
ICEBERG LAKE #3	5600	4/30	100	43.7	43.6	33.5
INDEPENDENCE	7850	5/01	69	26.5	23.6	19.8
INTERGAARD	6450	4/29	60	16.2	8.9	9.1
ISLAND PARK (ID)	6310	4/30	57	21.4	15.8	10.2
JAHNKE LAKE TRAIL	7200	4/30	52	16.4	10.8	8.3
JOHNSON PARK	6450	4/30	26	8.5	.0	3.5
JOSEPHINE LOWER #9	4900	4/29	60	23.6	25.0	18.9
KEELER CREEK	3300	5/01	17	8.9	-	.6
KINGS HILL	7500	4/30	69	20.9	18.0	17.1
KIWANIS CAMP	5720	5/02	5	1.6	.0	-
LAKE CAMP (WY)	7850	4/30	36	11.3	9.6	8.4
LAKE CREEK	6100	5/01	34	11.3	2.0	2.7
LAKEVIEW CANYON	6930	4/30	53	19.7	13.6	12.2
LAKEVIEW RIDGE	7400	4/30	49	18.2	10.6	10.0
LATHAM SPRINGS (ID)	7650	4/29	103	41.0	52.0	-
LEMHI PASS	7480	5/02	48	16.0	-	-
LEMHI RIDGE	8100	5/02	57	19.6	-	-
LICK CREEK	6860	4/29	56	16.0	10.8	11.1
LICK CREEK PILLOW	6860	4/29	SP	14.4	8.5	10.7
LITTLE PARK	7400	4/30	65	22.2	23.5	18.3
LOGAN CREEK	4300	4/29	23	8.0	1.6	2.7
LOLO PASS (ID)	5230	4/28	96	37.8	40.5	32.3
LONE MOUNTAIN	8880	4/30	89	31.9	-	-
LOOKOUT (ID)	5250	4/25	106	45.6	47.2	37.7
LOST HORSE	5940	4/29	111	44.9	50.4	34.3
LOST SOUL	4800	5/05	37	17.1	14.5	8.9
LOWER TWIN	7900	5/01	89	31.0	30.2	26.0
LUBRECHT FLUME	4800	5/05	20	7.8	.0	.0
LUBRECHT FOREST # 3	5450	5/04	29	1.0	3.1	4.0
LUBRECHT FOREST # 4	4650	5/05	5	1.6	.0	.4
LUBRECHT FOREST # 6	4040	5/01	3	1.1	.0	.0
LUBRECHT HYDROPLOT	4200	4/30	10	3.1	.0	.0
LUPINE CREEK (WY)	7300	5/05	34	11.6	12.0	7.7
MADISON PLATEAU	7750	5/01	72	29.0	35.4	22.4
MADISON PLATEAU PILLOW	7750	5/01	SP	30.0	36.6	23.7
MARIAS PASS	5250	4/30	54	20.2	17.6	19.3
MAYNARD CREEK	6210	4/28	54	19.7	21.6	21.8
MAYNARD CREEK PILLOW	6210	4/28	SP	14.2	15.1	14.1
MIDDLE MILL CREEK	7850	5/01	73	24.6	23.5	18.4
MILL CREEK	7500	4/30	73	20.8	12.2	16.5
MINERAL CREEK	4000	5/02	45	17.5	20.7	14.1
MISSION MOUNTAIN	5050	5/02	26	7.5	-	-

Average based On 1958-72 period. A - Aerial observation; water content estimated.
SP - Snow Pillow observation; water content only.

SNOW

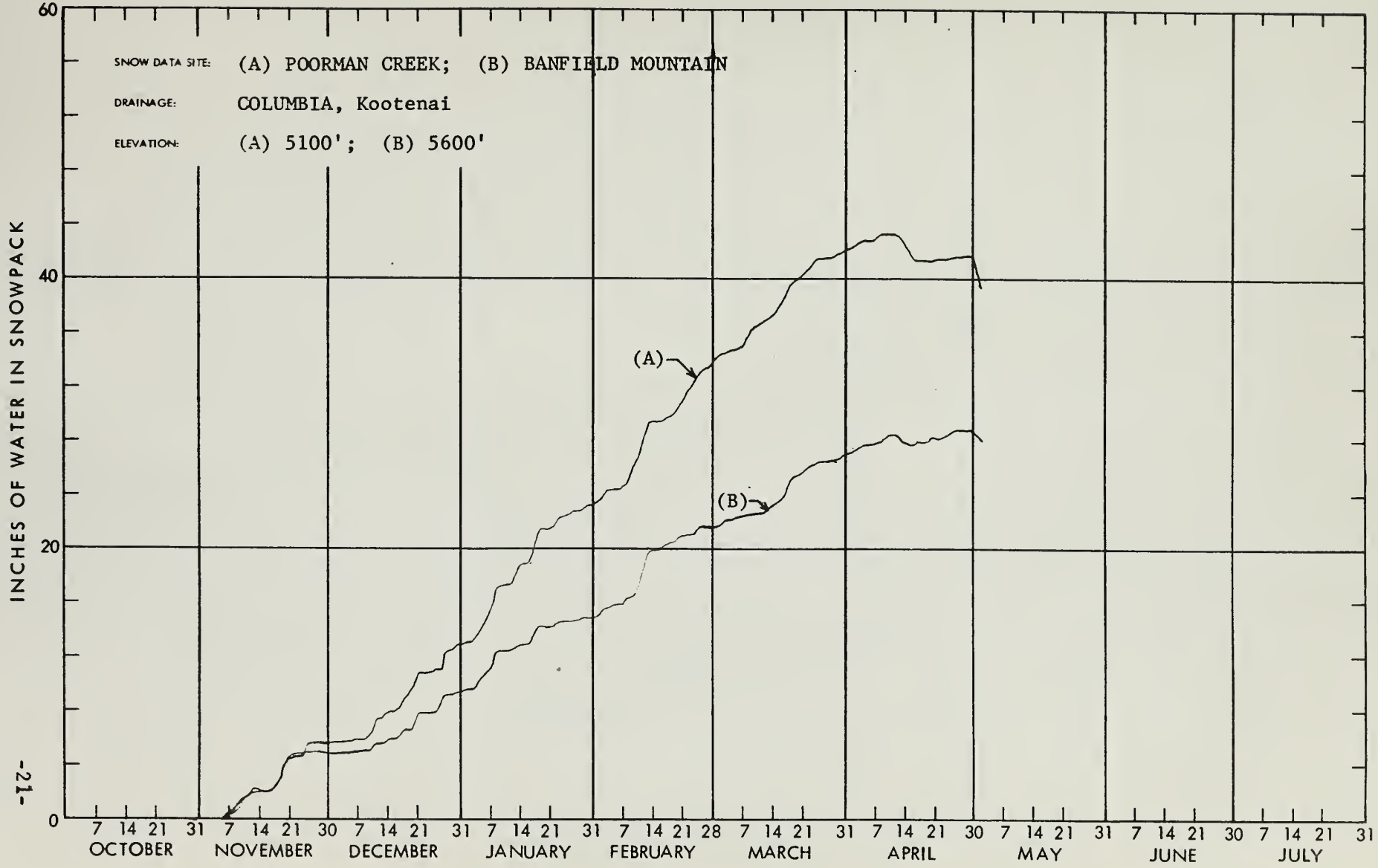
DRAINAGE BASIN and/or SNOW COURSE NAME	Elevation	THIS YEAR: Date of Survey	THIS YEAR: Snow Depth (Inches)	THIS YEAR: Water Content (Inches)	PAST RECORD: Water Content (inches) Last Year	PAST RECORD: Water Content (inches) Average
MONUMENT PEAK	8800	5/01	100	38.3	39.0	31.6
MOOSE CREEK (ID)	6200	4/30	70	25.4	20.0	16.0
MOUNT ALLEN # 7	5700	4/29	122	52.1	67.0	50.1
MOUNT LOCKHART	6400	4/25	62	24.0	22.4	25.4
MUDD LAKE	7650	4/29	78	26.8	25.2	23.5
NEZ PERCE CAMP	5580	5/02	51	21.7	19.2	12.5
NEZ PERCE CREEK	6500	4/30	41	11.6	.0	3.5
NEZ PERCE PASS	6570	5/02	69	28.0	23.0	15.6
NOISY BASIN	6040	4/30	131	53.6	76.3	-
NOISY BASIN PILLOW	6040	4/30	SP	44.9	-	-
NORRIS BASIN (WY)	7500	4/27	38	12.4	9.7	8.0
NORTH FK. ELK CREEK	6250	4/30	63	21.8	11.1	11.8
NORTH FORK JOCKO	6330	5/01	130	56.7	57.1	51.3
NORTH MEADOW	7500	5/01	52	15.7	11.7	11.5
NORTHEAST ENTRANCE	7400	4/29	35	11.3	8.8	7.8
NORTHEAST ENTRANCE PILL.	7400	4/29	SP	11.9	7.9	8.2
NOTCH	8500	5/01	89	30.8	24.4	18.5
OPHIR PARK	7150	4/30	84	26.6	19.7	-
PALISADE CREEK	8250	4/29	107	36.8	43.5	34.2
PEIGAN PASS #6	5500	4/29	103	45.5	57.6	43.1
PETERSON MEADOWS	7200	5/01	66	16.3	10.7	-
PETERSON MEADOWS PILLOW	7200	5/01	SP	18.6	11.7	-
PICKET PIN D	9450	5/01	99	38.0	35.0	-
PICKET PIN LOWER	6200	5/01	18	6.8	.0	-
PICKET PIN MIDDLE	7250	5/01	63	27.3	4.2	-
PICKET PIN UPPER	8100	5/01	87	31.2	28.7	-
PICNIC GROUNDS	6200	4/29	36	7.6	.0	2.8
PIPESTONE PASS	7200	4/30	51	14.0	.0	6.1
PLACER BASIN F	8800	5/01	89	33.0	26.5	-
POORMAN CREEK	5100	5/02	87	40.8	50.2	33.2
POORMAN CREEK PILLOW	5100	5/02	SP	39.1	50.8	31.4
PORCUPINE R.S.	6500	4/29	47	13.8	4.0	8.0
POTOMAGETON PARK	7150	4/30	52	20.8	14.2	12.0
PTARMIGAN #8	5800	4/30	111	46.4	51.2	42.0
RED MOUNTAIN	6000	4/29	62	25.3	33.1	21.0
ROCK CREEK	5600	5/01	51	17.0	.0	10.4
ROCKER PEAK	8000	4/28	80	23.6	17.6	18.0
ROCKER PEAK PILLOW	8000	4/29	SP	22.4	19.6	20.1
ROCKY BOY	4700	5/02	36	9.7	.0	1.5
ROCKY BOY PILLOW	4700	4/30	SP	10.4	.0	2.9
SACAJAWEA	6550	4/28	53	20.8	15.8	14.3
SADDLE MOUNTAIN	7940	4/30	105	38.9	37.8	28.8
SADDLE MOUNTAIN PILLOW	7940	4/30	SP	37.1	39.8	30.2
SAWTELL MOUNTAIN (ID)	8710	4/30	115	43.4	49.9	38.1
SENTINEL CREEK	8300	4/30	86	31.6	30.8	26.1
SHOWER FALLS	8100	4/29	99	36.6	43.6	28.7
SHOWER FALLS PILLOW	8100	4/29	SP	34.0	34.5	32.2
SILVER RUN	6630	5/01	25	8.6	-	-
SKALKAHO SUMMIT	7260	5/02	92	36.4	32.7	28.0
SLAG-A-MELT LAKE	8750	5/02	97	38.1	39.0	29.1

Average based On 1958-72 period. A - Aerial observation; water content estimated.
SP - Snow Pillow observation; water content only.

SNOW

DRAINAGE BASIN and/or SNOW COURSE NAME	Elevation	THIS YEAR Date of Survey	Snow Depth (Inches)	Water Content (Inches)	PAST RECORD Water Content (inches) Last Year	Average
SLIDE ROCK MOUNTAIN	7100	5/01	76	25.8	23.6	20.0
SMUGGLER MINE	6960	5/01	55	16.6	12.1	11.6
SOUTH FORK SHIELDS	8100	4/29	95	32.8	33.2	30.0
SPUR PARK	8000	5/01	78	28.0	27.0	26.0
SPUR PARK PILLOW	8100	5/01	SP	27.7	26.1	25.8
STAHL PEAK	6050	4/28	106	43.2	66.6	44.3
STAR LAKE E	9650	5/01	134	49.5	66.0	-
STEMPLE PASS	6600	4/29	70	19.1	9.4	11.9
STORM LAKE	7780	5/01	77	22.7	13.1	17.4
STUART MILL	6500	4/29	50	11.9	.0	6.7
STUART MOUNTAIN	7400	5/02	101	41.5	42.7	35.8
SUCKER CREEK	5960	5/02	8	2.3	.0	-
SUGARLOAF	7350	5/02	54	17.2	-	-
SYLVAN PASS (WY)	7100	4/30	46	16.7	12.9	11.1
TARGHEE PASS (ID)	7000	4/30	49	17.3	15.9	15.4
TAYLOR ROAD	4080	4/30	23	5.0	.0	-
TEN MILE LOWER	6600	5/02	50	14.2	4.0	6.0
TEN MILE MIDDLE	6800	5/01	68	19.5	11.2	13.8
TEN MILE UPPER	8000	5/01	75	22.2	14.6	17.1
TEPEE CREEK	8000	5/01	72	24.8	22.4	18.0
TEPEE CREEK PILLOW	8000	5/01	SP	19.9	16.9	-
TIMBERLINE CREEK	8850	5/01	72	22.6	21.9	19.8
TRAIL CREEK	7090	5/02	47	15.7	-	-
TV MOUNTAIN	6800	5/05	75	26.3	25.7	21.9
TWELVEMILE CREEK	5600	4/29	75	28.8	27.2	15.6
TWELVEMILE CREEK PILLOW	5600	4/29	SP	26.7	26.9	14.5
TWENTY-ONE MILE	7150	4/28	60	23.4	22.1	17.6
TWIN LAKES	6510	4/29	131	52.3	63.9	46.8
TWIN LAKES PILLOW	6400	4/29	SP	52.4	54.0	44.8
VALLEY VIEW (ID)	6500	4/30	58	22.5	11.8	14.2
WALDRON	5600	4/25	32	11.2	4.1	7.5
WALDRON PILLOW	5600	4/25	SP	10.4	-	10.2
WEASEL DIVIDE	5450	4/29	89	38.3	53.1	37.2
WEST YELLOWSTONE	6700	4/29	36	13.1	9.2	7.2
WEST YELLOWSTONE PILLOW	6700	4/30	SP	10.1	7.4	6.5
WHISKEY CREEK	6800	5/01	59	25.4	27.6	20.3
WHISKEY CREEK PILLOW	6800	5/01	SP	21.4	22.5	-
WHITE ELEPHANT (ID)	7700	4/30	83	31.7	39.5	-
WHITE MILL	8700	4/30	91	32.6	40.7	30.0
WHITE MILL PILLOW	8700	4/30	SP	31.2	34.2	-
WHITE PINE RIDGE	8850	5/01	46	12.0	4.4	5.0
WILLOW CREEK	6500	4/30	39	12.5	.4	-
WOLVERINE (WY)	7650	4/30	42	15.4	11.0	-
WRONG CREEK	5700	4/29	45	15.2	14.5	11.9
WRONG RIDGE	6800	4/30	70	22.4	24.7	22.2

Average based On 1958-72 period. A - Aerial observation; water content estimated.
SP - Snow Pillow observation; water content only.


SNOW DATA SITE: (A) POORMAN CREEK; (B) BANFIELD MOUNTAIN
DRAINAGE: COLUMBIA, Kootenai
ELEVATION: (A) 5100'; (B) 5600'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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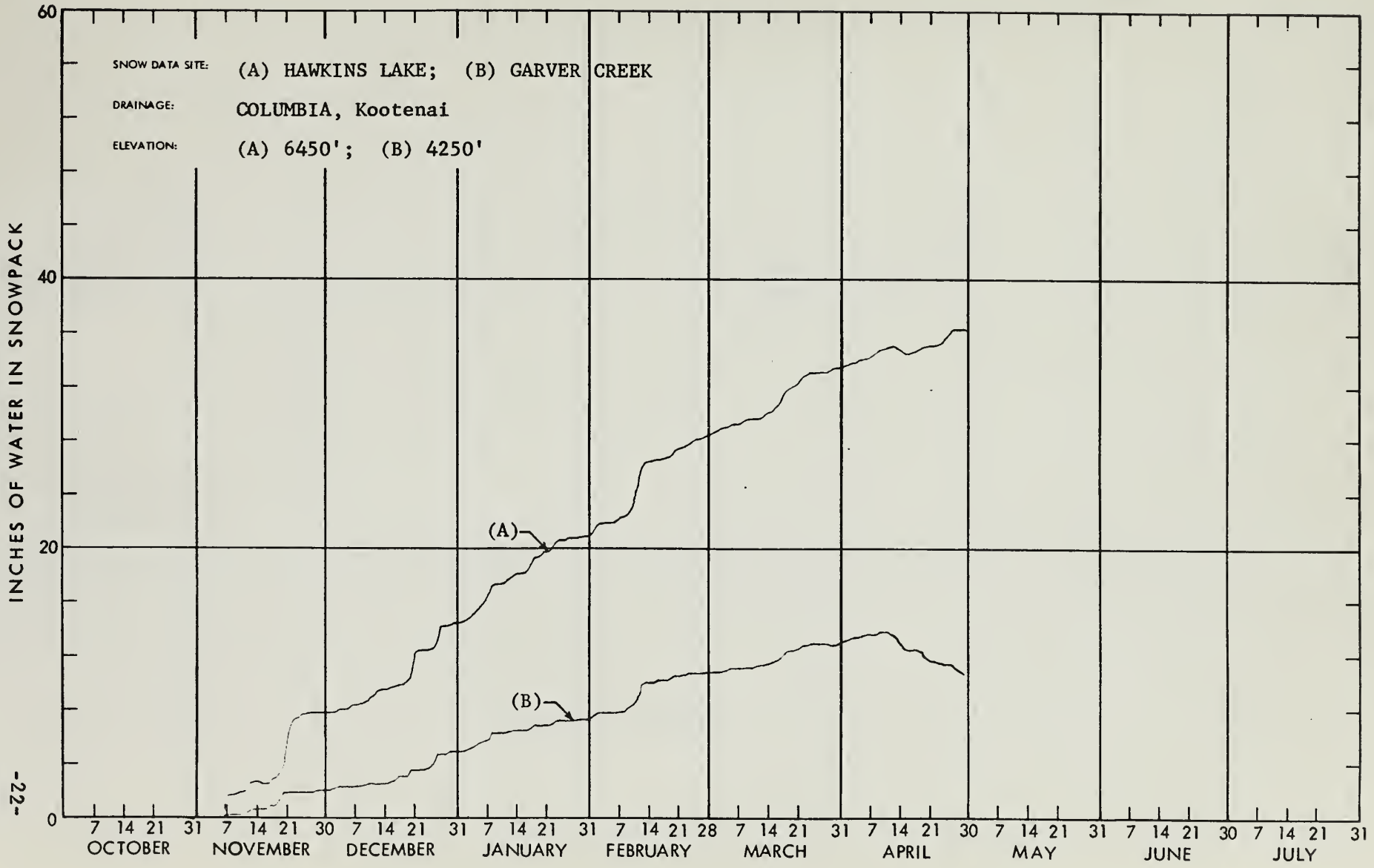
SNOW DATA SITE: (A) HAWKINS LAKE; (B) GARVER CREEK
DRAINAGE: COLUMBIA, Kootenai
ELEVATION: (A) 6450'; (B) 4250'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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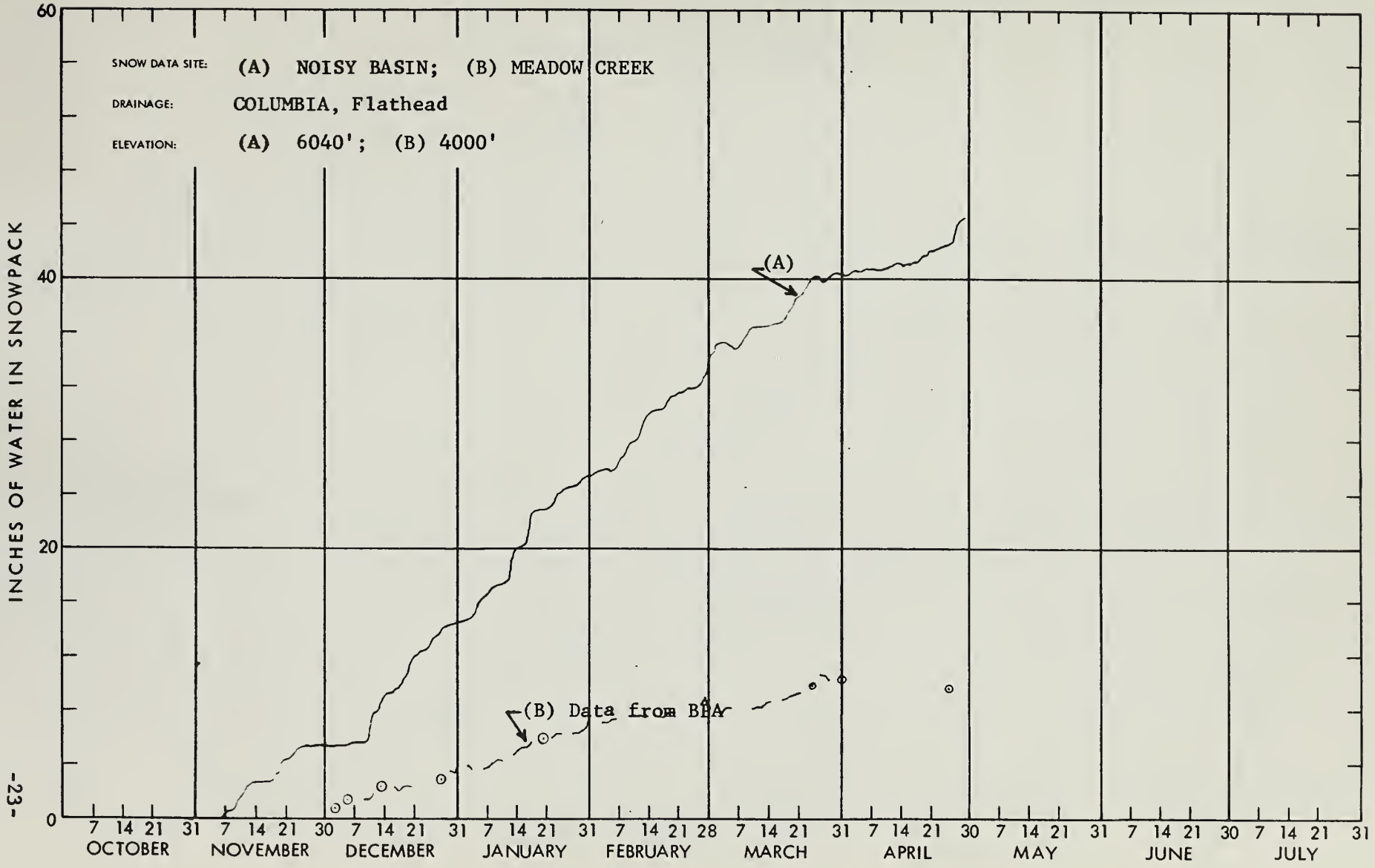
SNOW DATA SITE: (A) NOISY BASIN; (B) MEADOW CREEK
DRAINAGE: COLUMBIA, Flathead
ELEVATION: (A) 6040'; (B) 4000'
(A)
(B) Data from BPA
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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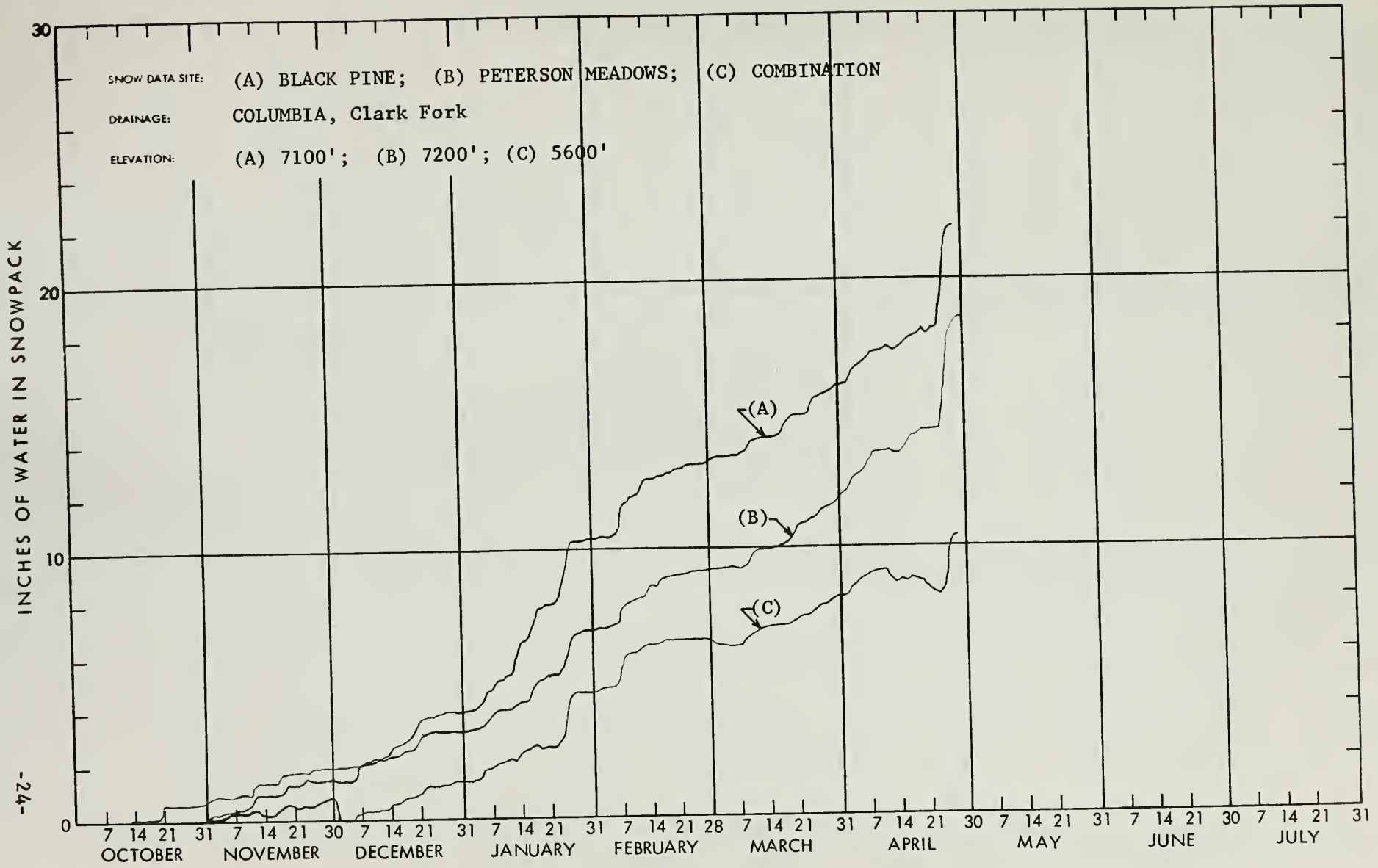
SNOW DATA SITE: (A) BLACK PINE; (B) PETERSON MEADOWS; (C) COMBINATION
DRAINAGE: COLUMBIA, Clark Fork
ELEVATION: (A) 7100'; (B) 7200'; (C) 5600'
INCHES OF WATER IN SNOWPACK
30
20
10
0
(A)
(B)
(C)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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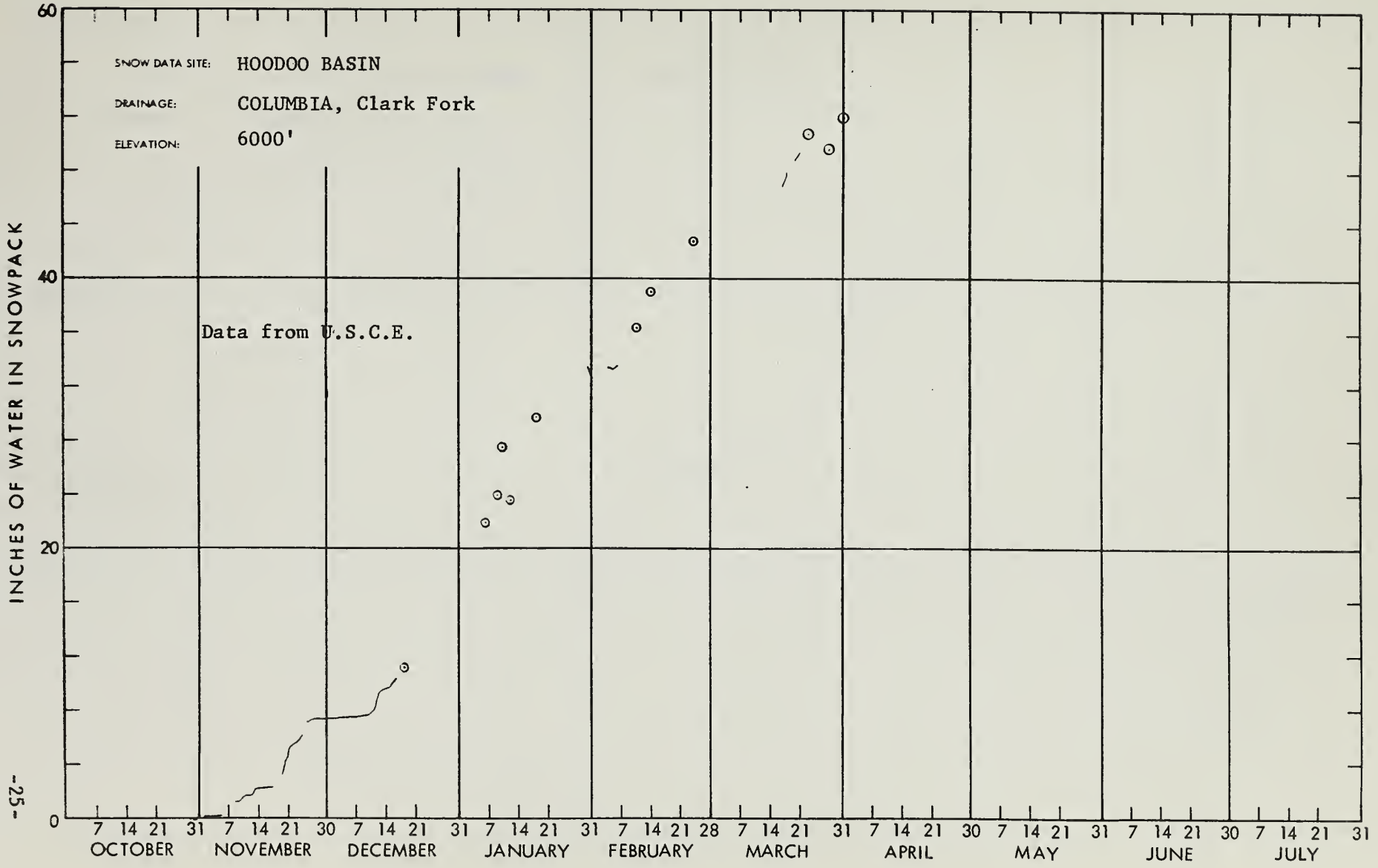
SNOW DATA SITE: HOODOO BASIN
DRAINAGE: COLUMBIA, Clark Fork
ELEVATION: 6000'
Data from U.S.C.E.
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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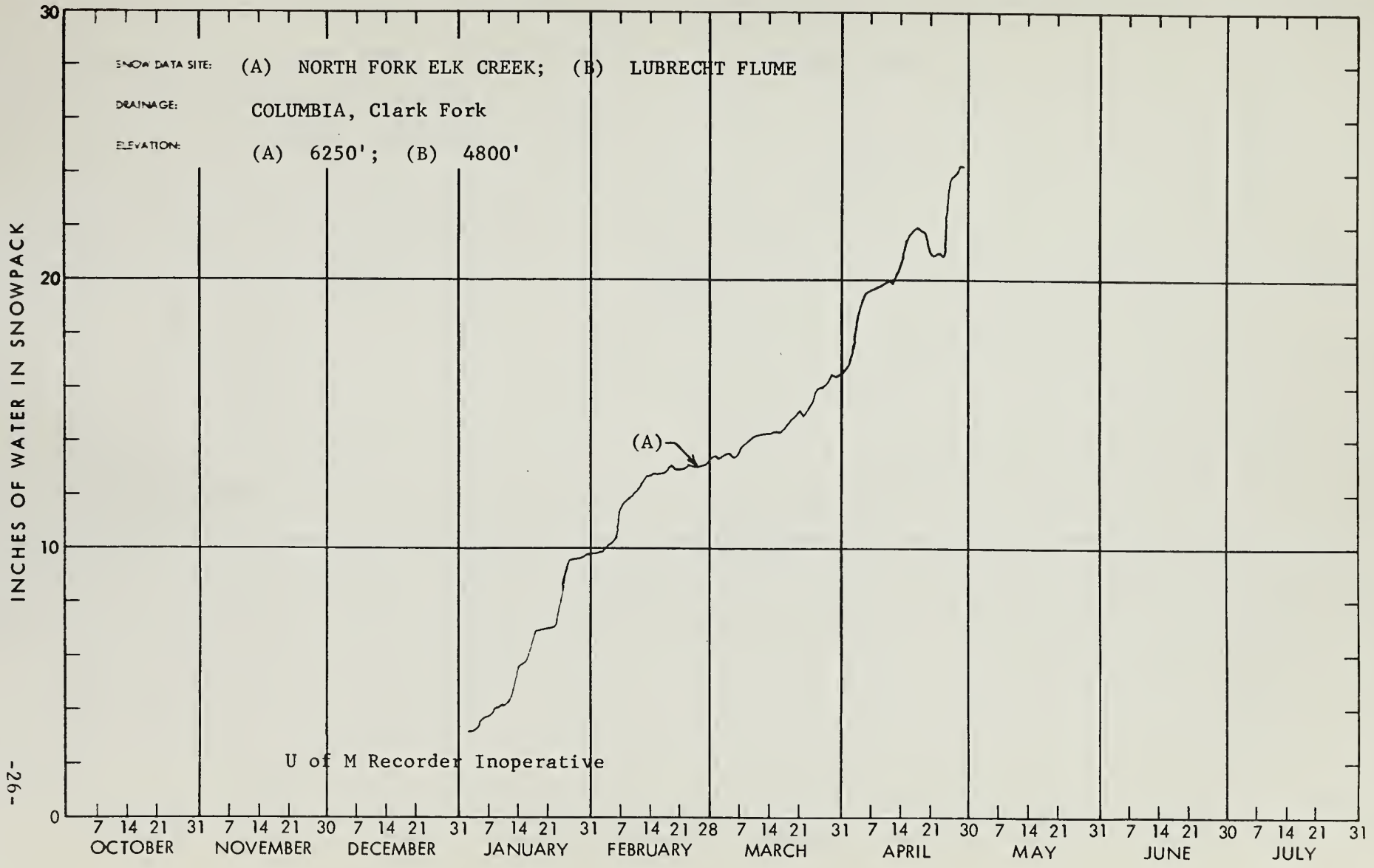
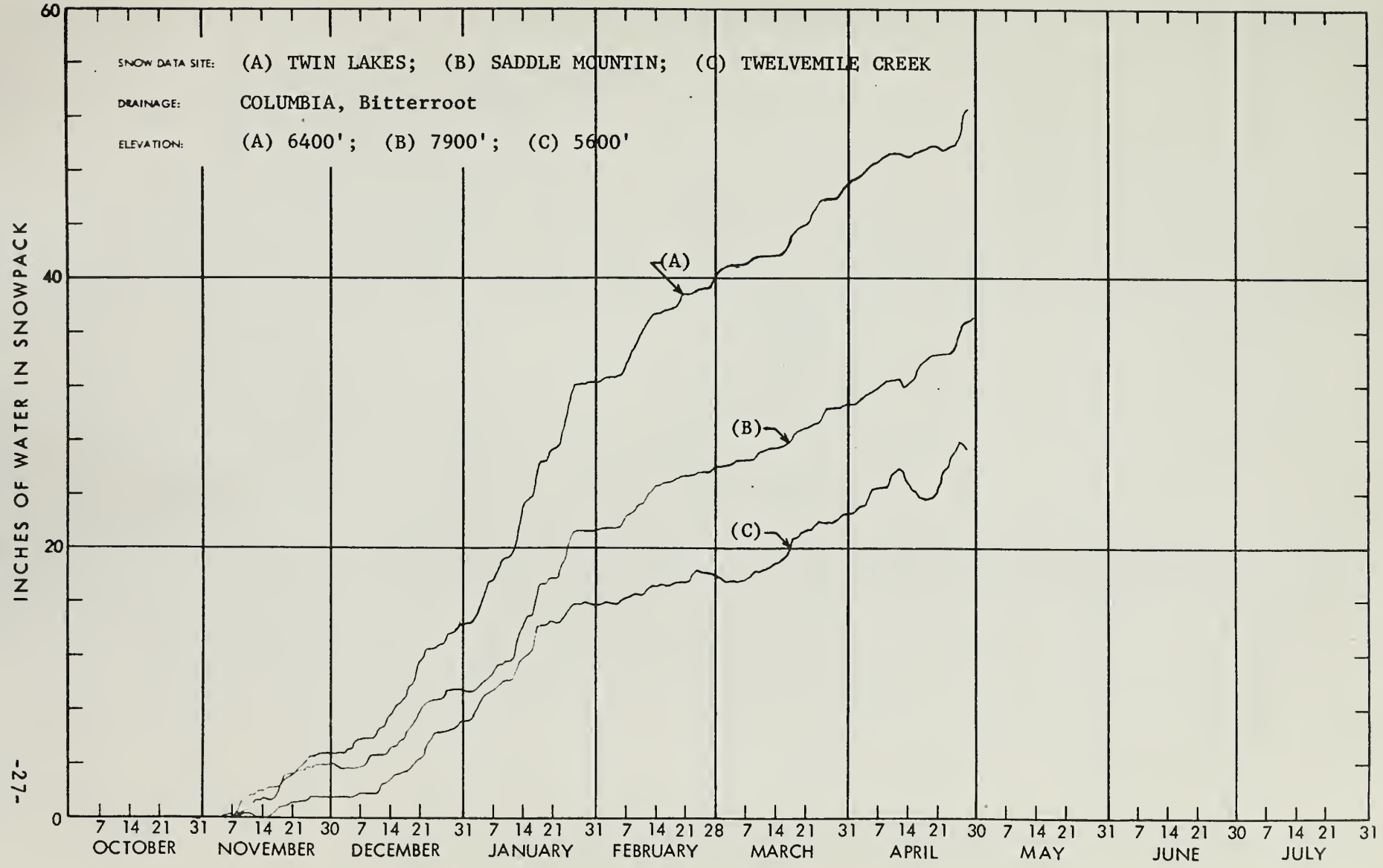

SNOW DATA SITE: (A) NORTH FORK ELK CREEK; (B) LUBRECHT FLUME
DRAINAGE: COLUMBIA, Clark Fork
ELEVATION: (A) 6250'; (B) 4800'
INCHES OF WATER IN SNOWPACK
30
20
10
0
(A)
U of M Recorder Inoperative
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY


SNOW DATA SITE: (A) TWIN LAKES; (B) SADDLE MOUNTIN; (C) TWELVEMILE CREEK
DRAINAGE: COLUMBIA, Bitterroot
ELEVATION: (A) 6400'; (B) 7900'; (C) 5600'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
(C)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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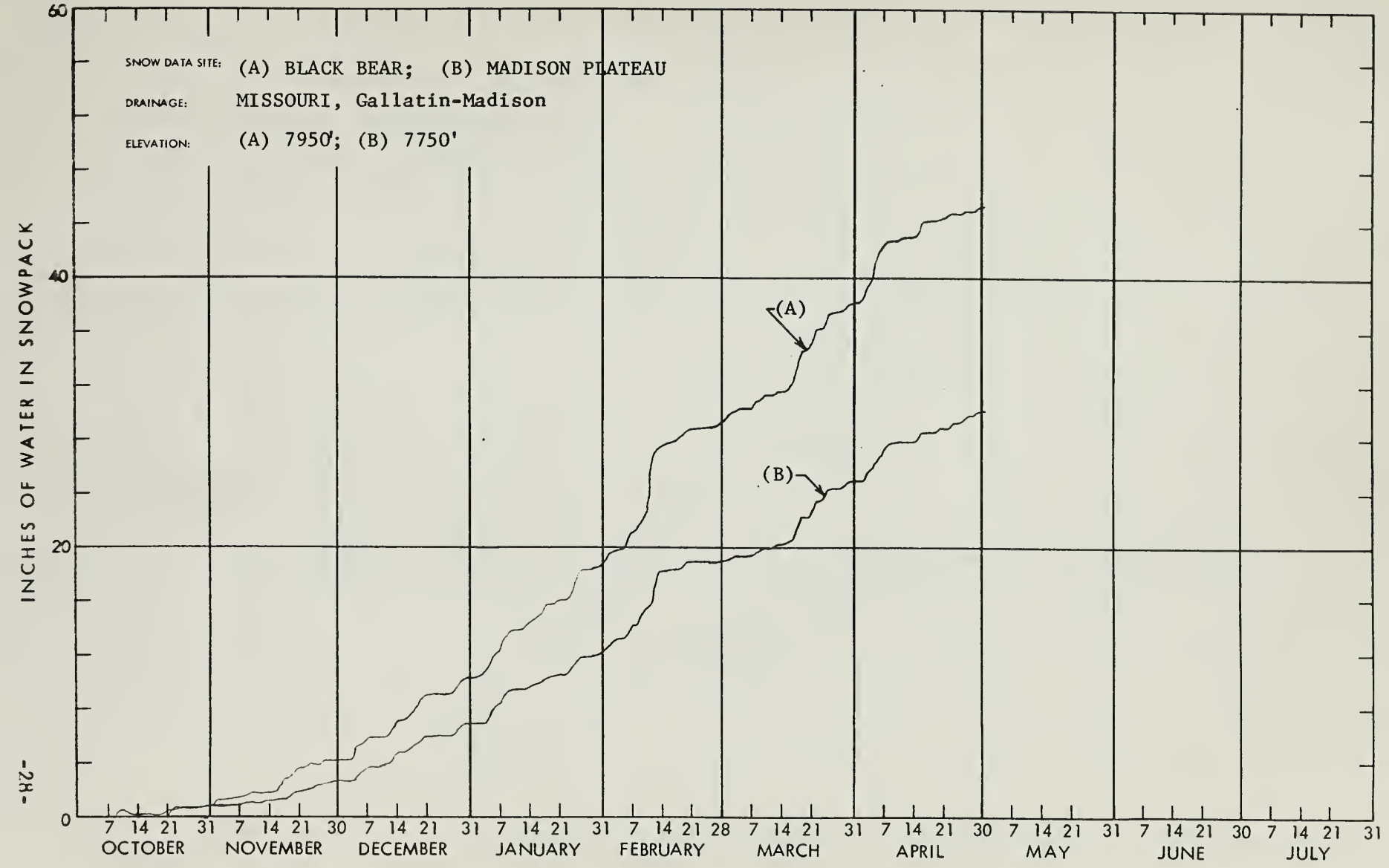
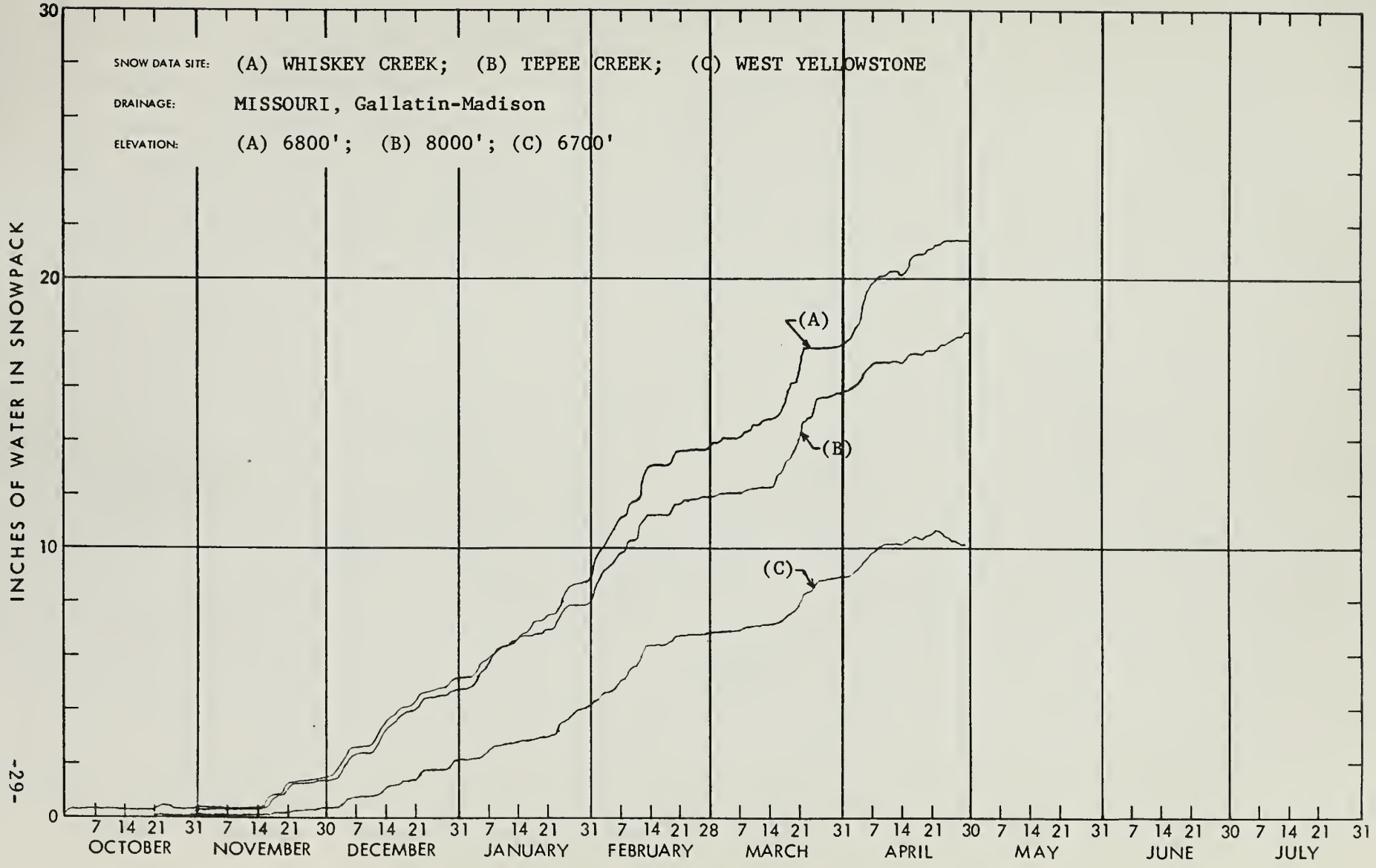

SNOW DATA SITE: (A) BLACK BEAR; (B) MADISON PLATEAU
DRAINAGE: MISSOURI, Gallatin-Madison
ELEVATION: (A) 7950'; (B) 7750'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY


SNOW DATA SITE: (A) WHISKEY CREEK; (B) TEPEE CREEK; (C) WEST YELLOWSTONE
DRAINAGE: MISSOURI, Gallatin-Madison
ELEVATION: (A) 6800'; (B) 8000'; (C) 6700'
INCHES OF WATER IN SNOWPACK
30
20
10
0
(A)
(B)
(C)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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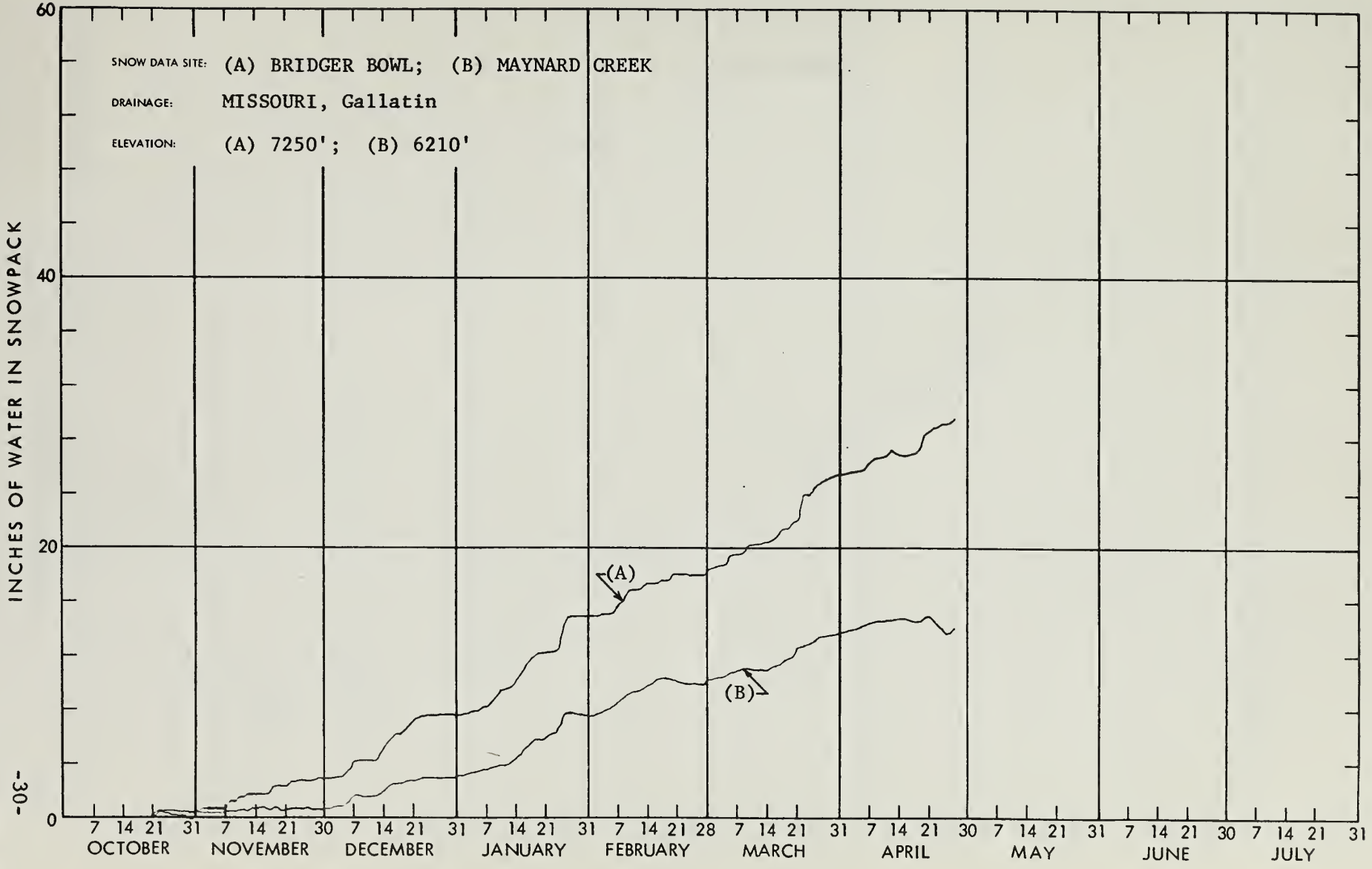
SNOW DATA SITE: (A) BRIDGER BOWL; (B) MAYNARD CREEK
DRAINAGE: MISSOURI, Gallatin
ELEVATION: (A) 7250'; (B) 6210'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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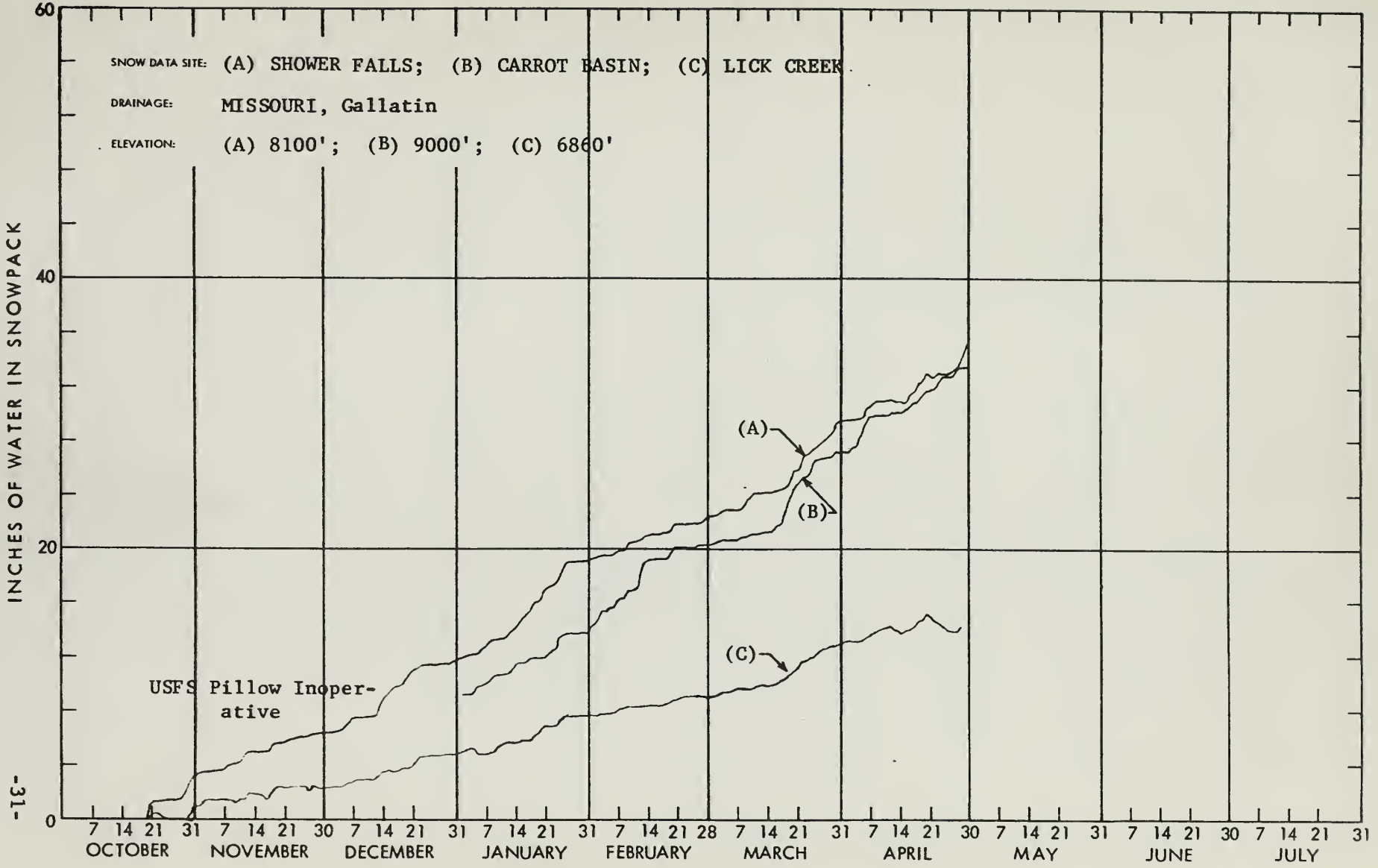
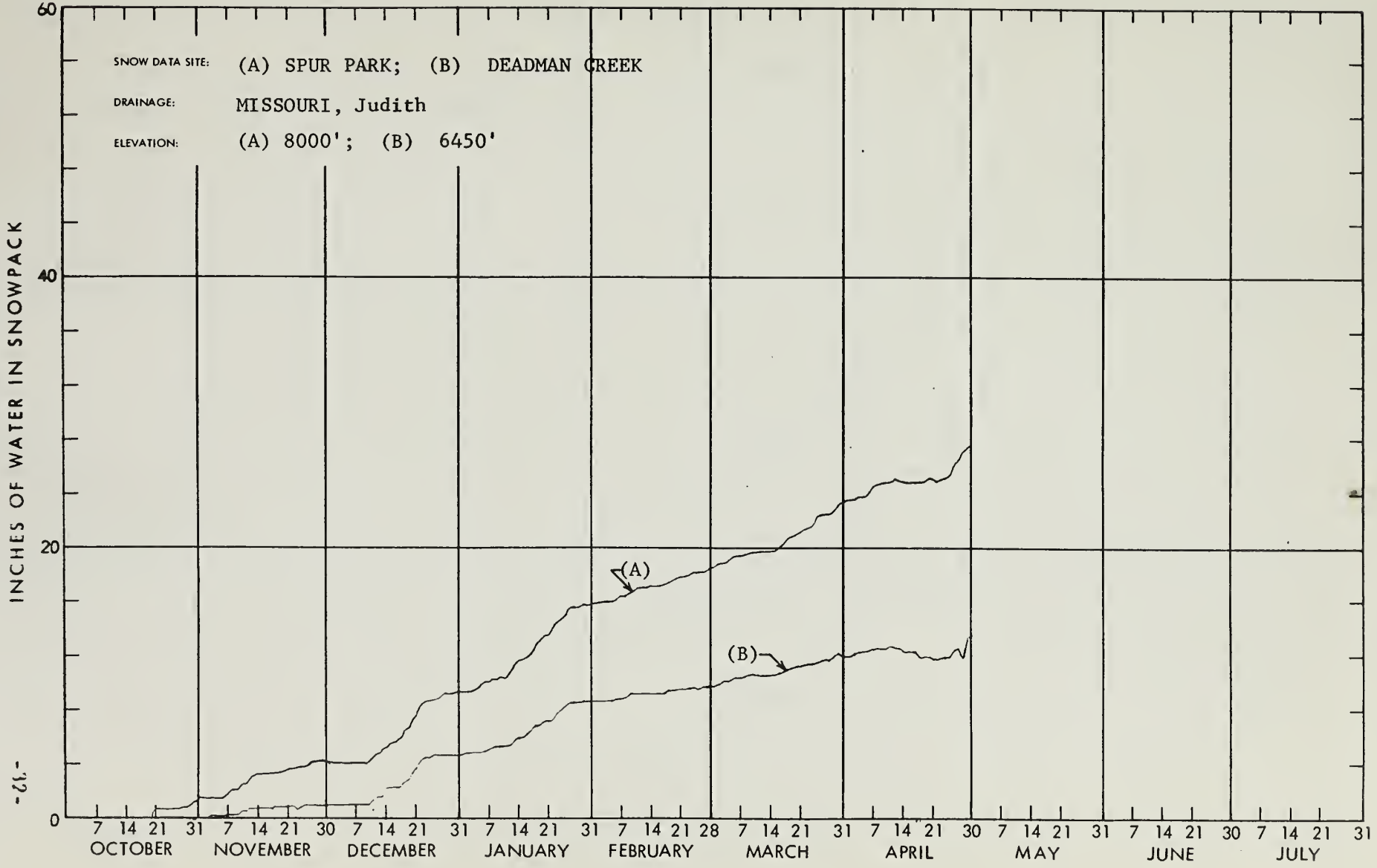

SNOW DATA SITE: (A) SHOWER FALLS; (B) CARROT BASIN; (C) LICK CREEK
DRAINAGE: MISSOURI, Gallatin
ELEVATION: (A) 8100'; (B) 9000'; (C) 6860'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
(C)
USFS Pillow Inoperative
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY


SNOW DATA SITE: (A) SPUR PARK; (B) DEADMAN CREEK
DRAINAGE: MISSOURI, Judith
ELEVATION: (A) 8000'; (B) 6450'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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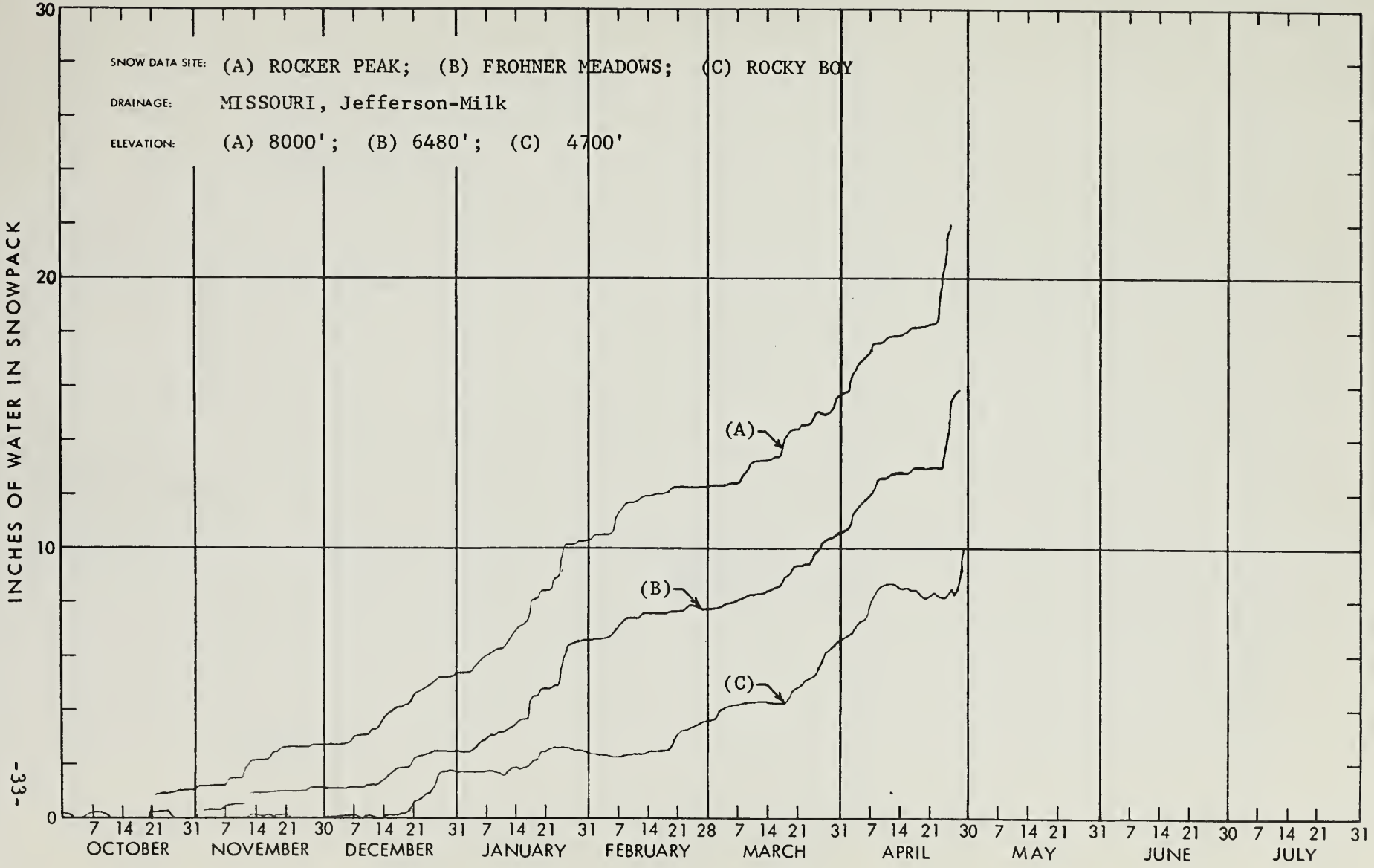
SNOW DATA SITE: (A) ROCKER PEAK; (B) FROHNER MEADOWS; (C) ROCKY BOY
DRAINAGE: MISSOURI, Jefferson-Milk
ELEVATION: (A) 8000'; (B) 6480'; (C) 4700'
INCHES OF WATER IN SNOWPACK
30
20
10
0
(A)
(B)
(C)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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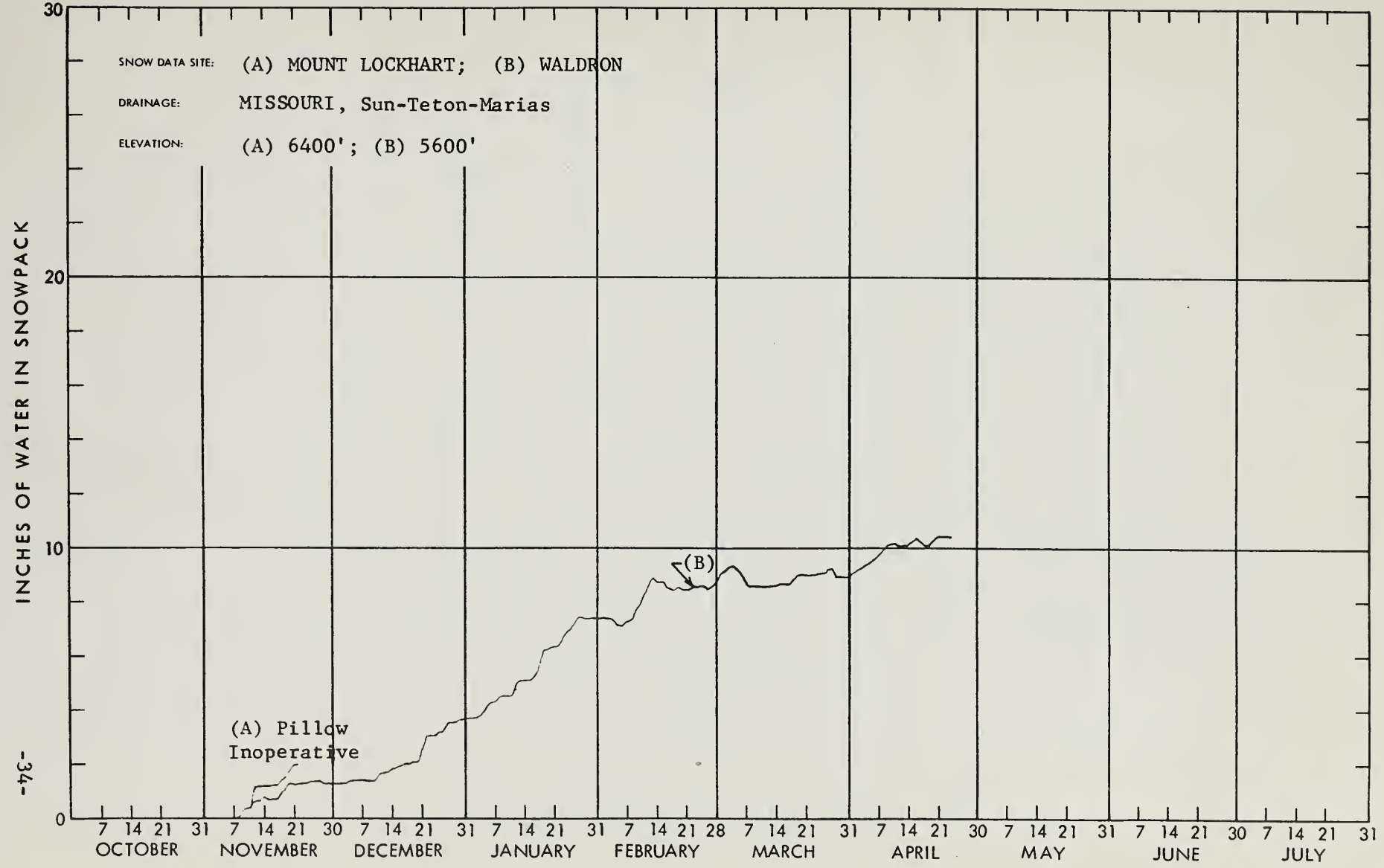
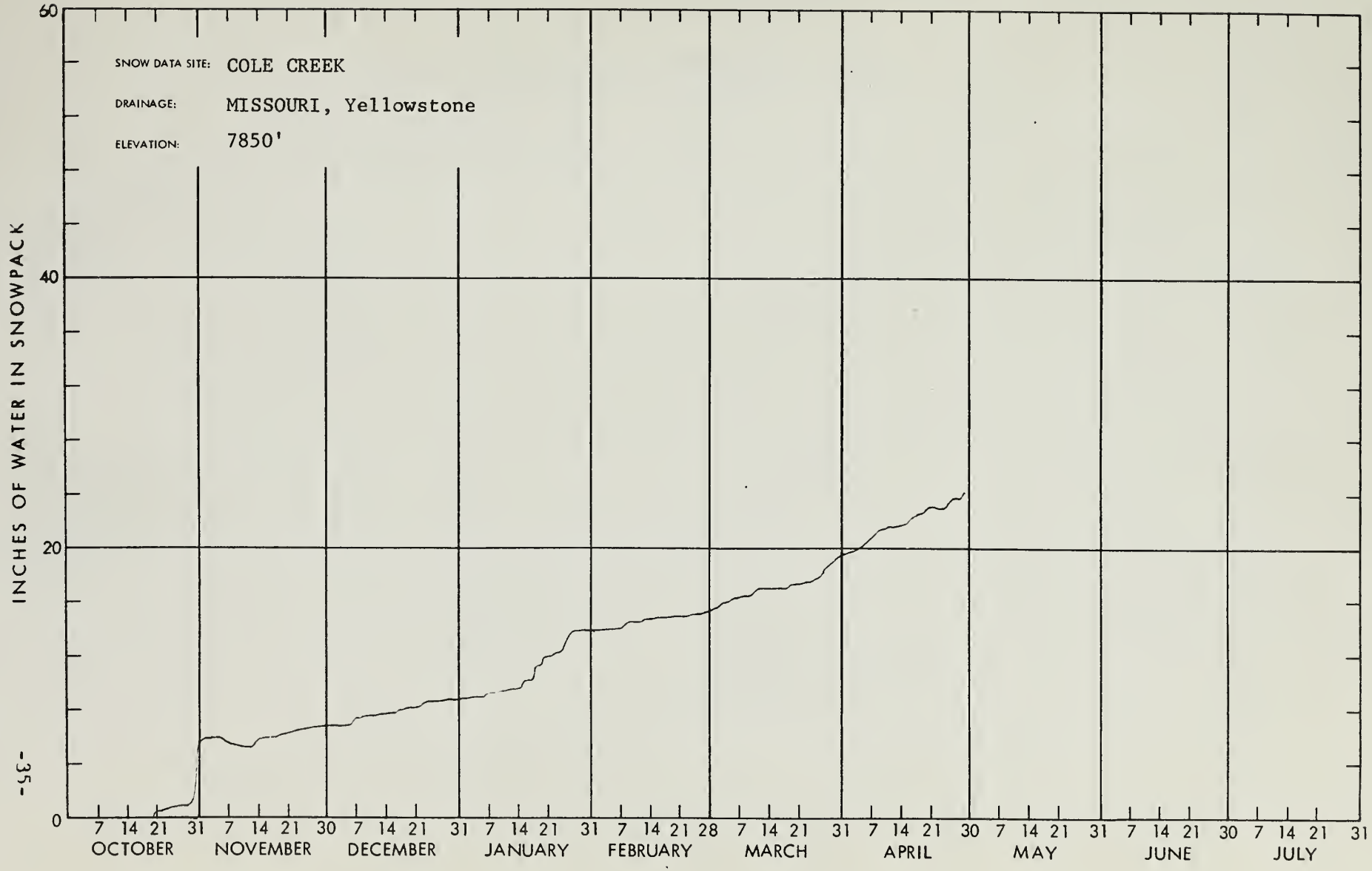

SNOW DATA SITE: (A) MOUNT LOCKHART; (B) WALDRON
DRAINAGE: MISSOURI, Sun-Teton-Marias
ELEVATION: (A) 6400'; (B) 5600'
INCHES OF WATER IN SNOWPACK
30
20
10
0
(A) Pillow Inoperative
(B)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH APRIL MAY JUNE JULY


SNOW DATA SITE: COLE CREEK
DRAINAGE: MISSOURI, Yellowstone
ELEVATION: 7850'
INCHES OF WATER IN SNOWPACK
60
40
20
0
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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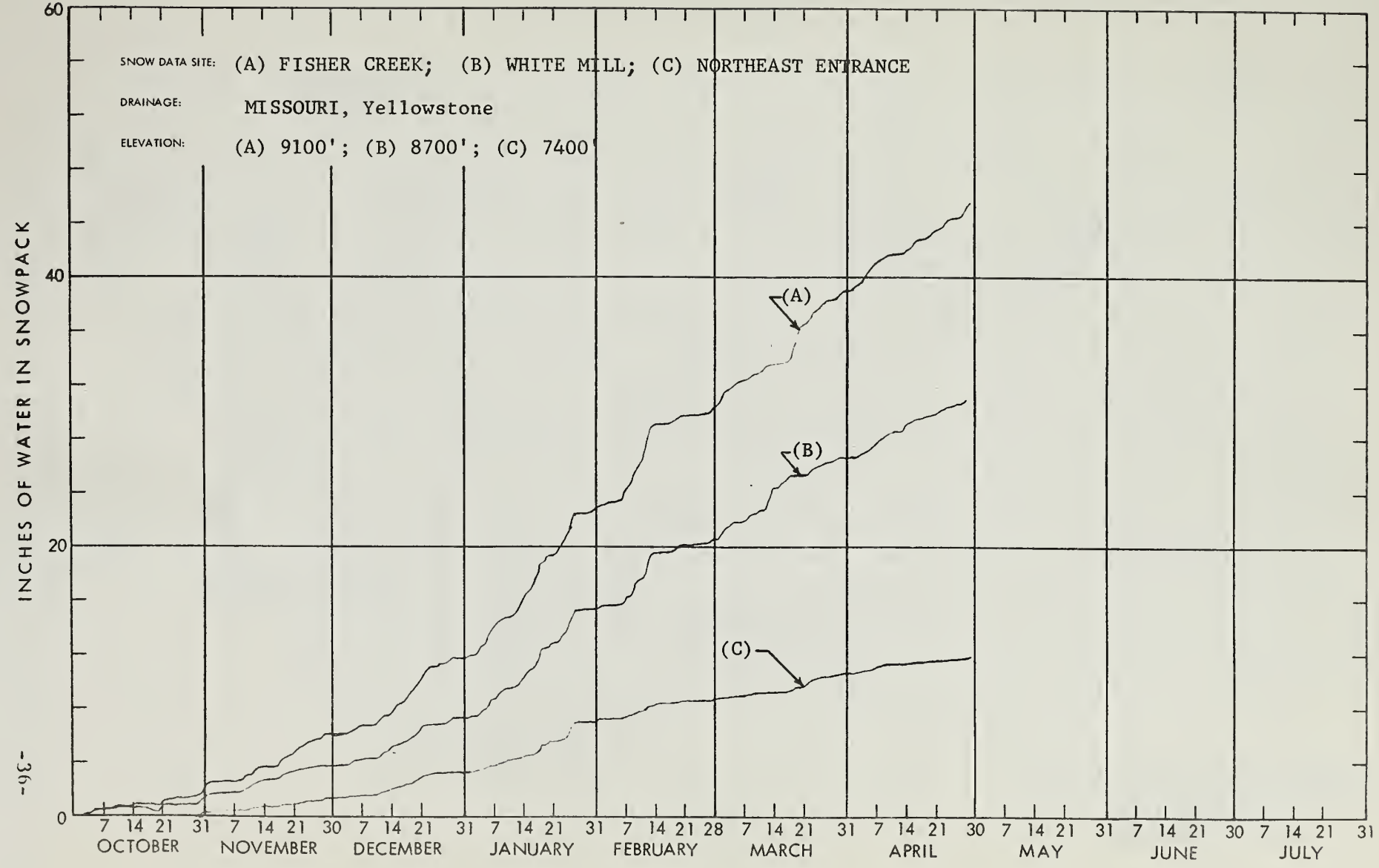
SNOW DATA SITE: (A) FISHER CREEK; (B) WHITE MILL; (C) NORTHEAST ENTRANCE
DRAINAGE: MISSOURI, Yellowstone
ELEVATION: (A) 9100'; (B) 8700'; (C) 7400'
INCHES OF WATER IN SNOWPACK
60
40
20
0
(A)
(B)
(C)
7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 31 7 14 21 28 7 14 21 31 7 14 21 30 7 14 21 31 7 14 21 30 7 14 21 31
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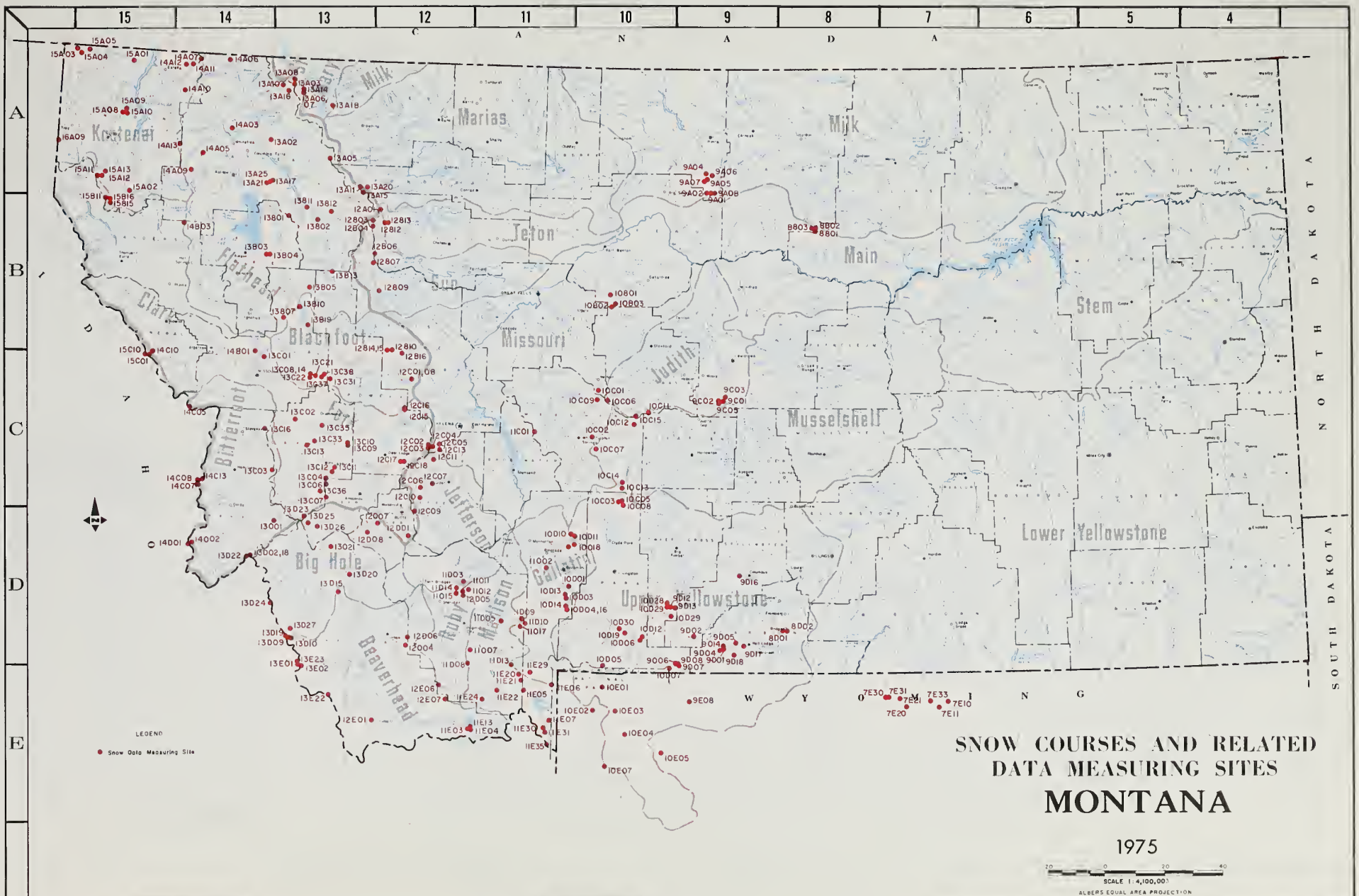
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CANADA
NORTH DAKOTA
SOUTH DAKOTA
WYOMING
IDAHO
Kootenai
Marias
Milk
Teton
Main
Stem
Clark Fork
Flathead
Blackfoot
Missouri
Judith
Musselshell
Lower Yellowstone
Bitterroot
Big Hole
Jefferson
Gallatin
Upper Yellowstone
Ruby
Madison
Beaverhead
LEGEND
Snow Data Measuring Site
SNOW COURSES AND RELATED
DATA MEASURING SITES
MONTANA
1975
SCALE 1:4,100,000
ALBERS EQUAL AREA PROJECTION

INDEX to MONTANA SNOW COURSES and DATA SITES

SNOW COURSES

COLUMBIA RIVER BASIN

KOOTENAI RIVER

Drainage Basin & Snow Course	Number	Elev.	Sec.	Twp.	Range	Sensors in Addition to Snow Courses 1/	Measuring Dates 2/	Meas. By 3/
Bald Eagle Peak	15A11	5700	6	27N	31W		3,4,5,5½,6	1
Banfield Mountain	15A08	5600	4	32N	30W	S,P	2,3,4,5,5½,6	1
Baree Creek	15B11	5500	36	26N	31W		3,4,5,5½	2
Baree Midway	15B16	4600	31	26N	30W		3,4,5,5½	2
Baree Trail	15B15	3800	5	25N	30W	M	3,4,5,5½	2
Bristow Creek	15A10	3900	2	32N	30W		2,3,4,5,5½,6	1
Brush Creek Timber	14A13	5000	12	30N	26W		3,4,5	1,2
Cedar Grove	15A13	4100	35	28N	31W		2,3,4,5,5½,6	1
Davis Creek	15A04	5400	20	37N	33W		2,3,4,5,5½,6	1
Carver Creek	15A05	4250	18	37N	32W	S,P	2,3,4,5,5½,6	1
Cravas Creek	14A11	4300	1	36N	25W		3,4,5,5½,6	1
Hawkins Lake	15A03	6450	18	37N	33W	S,P	2,3,4,5,5½,6	1
Keeler Creek	16A09	3300	25	30N	35W		3,4,5	1
Lost Soul	15A09	4800	31	33N	29W		2,3,4,5,5½,6	1
Murphy Lake #. S.	14A10	3000	5	34N	25W	M,NSC	Monthly	2
Poorman Creek	15A12	5100	5	27N	31W	S,P	2,3,4,5,5½,6	1
Raven	15A02	3050	2	26N	29W	M,NSC	Monthly	2
Red Mountain	15A01	6000	4	36N	29W		3,4,5,5½,6	1
Stahl Peak	14A12	6050	5	36N	25W		3,4,5,5½,6	1
Wasael Divide	14A07	5450	20	37N	24W		3,4,5,5½,6	1

FLATHEAD RIVER

Basoo Peak	14B03	5350	11	24N	25W		3,4,5	5
Beaver Lake	13A11	5900	31	28N	11W		3,4,5	1
Big Creek	13B03	6750	7	22N	18W		3,4,5, 6	1,5
Camp Misery	13A17	6400	30	28N	18W		3,4,5, 6	1,2
Desert Mountain	13A02	5600	24	31N	19W	M	1,2,3,4,5, 6	1,2
Fatty Creek	13B04	5500	8	22N	18W		3,4,5, 6	1,5
Flattop Mountain	13A19	6300	12	35N	18W	S,P	4	1,6
Griffin Creek Divide	14A09	5150	11	28N	25W		3,4,5	5
Gunslight Lake	13B12	6300	30	26N	13W		3,4,5	1
Hell Roaring Divide	14A03	5770	35	32N	22W		1,2,3,4,5,5½,6	2
Holbrook	13B13	4530	18	21N	13W	A	1,2,3,4,5	1
Kishenehn	14A06	3890	14	37N	22W		3,4	6
Logan Creek	16A05	4300	34	30N	24W		3,4,5	1,2
Mineral Creek	13A16	4000	29	35N	17W		3,4,5	6
Noisy Basin	13A15	6040	25	28N	19W	S,P,M	3,4,5	1,2
Noisy Creek	13A21	3600	35	28N	19W		3,4,5	1,2
North Fork Jocko	13B07	6330	3	17N	17W		3,4,5,5½,6	1,5
Spotted Bear Mountain	13B02	7000	23	25N	15W	A	1,2,3,4,5	1
Trinkus Lake	13B01	6100	9	25N	17W		3,4,5	1
Twin Creeks	13B11	3580	25	26N	16W	A	1,2,3,4,5	1
Upper Holland Lake	13A05	6200	28	20N	15W		3,4,5	1

CLARK FORK RIVER

Black Pine	13C13	7100	26	8N	15W	S,P,M	1,2,3,4,5,5½,6	1
Combination	13C33	5600	7	8N	14W	S,P	1,2,3,4,5,5½,6	1
Copper Bottom	12B16	5200	15	15N	8W		3,4,5	1,2
Copper Camp	12B14	6950	3	15N	9W		3,4,5	1,2
Copper Creek	12B10	5700	1	15N	9W		3,4,5	1,2
Copper Lake Creek	12B15	6100	3	15N	9W		3,4	2
Cottonwood Creek	12C17	6400	14	7N	8W		1,2,3,4,5	1,2
Coyote Mill	13B10	6200	12	18N	16W		1,2,3,4,5	11
Dix Hill	12C15	6400	24	11N	8W	P	3,4	1
El Dorado Mine	13C09	7800	23	8N	12W		3,4,5	1
Frad Burr Pass	13C11	8000	12	6N	13W		3,4,5	1
Gold Creek Lake	13C10	7200	14	8N	12W		3,4	1
Heart Lake Trail	14C10	6800	11	14N	27W		1,2,3,4,5,5½,6	1
Hoodoo Basin	15C10	6000	17	14N	27W		1,2,3,4,5,5½,6	1
Hoodoo Creek	15C01	5900	16	14N	27W		1,2,3,4,5,5½,6	1
Intergaard	13C04	6450	6	5N	13W		2,3,4,5	4
Lower Willow Creek	13C35	4740	3	9N	14W	P,NSC	Monthly	1
Lubrecht Camp	13C14	4100	11	13N	15W	M,NSC	Monthly	8
Lubrecht Flume	13C38	4680	13	13N	14W	S,P	1,2,3,4,5	8
Lubrecht Forest No. 3	13C21	5450	19	13N	14W		1,2,3,4,5	8
Lubrecht Forest No. 4	13C22	4650	23	13N	15W		1,2,3,4,5	8
Lubrecht Forest No. 6	13C08	4040	11	13N	15W		1,2,3,4,5	8
Lubrecht Hydroplot	13C37	4200	22	13N	14W		1,2,3,4,5	8
North Fork Elk Creek	13C31	6250	20	13N	13W	S,P	1,2,3,4,5,5½,6	8
Ophir Park	12C16	7150	13	11N	8W		1,2,3,4,5	11
Peterson Meadows	13C36	7200	2	6N	14W	S,P	1,2,3,4,5	2
Red Lion	13C12	7100	22	6N	13W		3,4,5	1
Saeley Lake R. S.	13B19	4030	21	17N	15W	M,NSC	Monthly	2
Skalkaho Summit	13C03	7260	30	6N	17W	P,M	3,4,5,5½,6	1
Slide Rock Mountain	13C02	7100	35	10N	16W		3,4,5	1
Storm Lake	13C07	7780	19	6N	13W		1,2,3,4,5	2
Stuart Mill	13C06	6500	19	5N	13W		2,3,4	4
Stuart Mountain	13C01	7400	6	14N	18W		3,4,5,5½,6	2
Sugarloaf	12C18	7350	13	7N	8W		3,4	2
TV Mountain	14A01	6800	33	15N	19W		1,2,3,4,5,5½,6	8

BITTERROOT RIVER

Ambrose	13C16	6480	28	9N	18W		3,4,5	1
East Fork R. S.	13D01	5400	16	2N	17W		3,4	1
Gibbons Pass	13D02	7100	4	2S	19W	M	1,2,3,4,5,5½,6	1,3
Lolo Pass	14C05	5250	11	10N	24W	M	1,2,3,4,5	1,2
Lost Horse	14C07	5940	5	4N	23W		3,4,5,5½,6	1
Nez Perce Camp	14D02	5380	19	1S	23W		3,4,5	1
Nez Perce Pass	14D01	6570	25	1S	24W		3,4,5	1
Saddle Mountain	13D22	7940	5	2S	19W	S,P	1,2,3,4,5,5½,6	1
Twelvemile Creek	14C13	5600	34	5N	23W	S,P	1,2,3,4,5,5½,6	1
Twin Lakes	14C08	6510	32	5N	23W	S,P	1,2,3,4,5,5½,6	1

HUDSON BAY BASIN

ST. MARY RIVER

Hudson Bay Divide	13A18	5800	24	34N	14W		3,4,5	3,9
Iceberg Lake No. 3	13A03	5600	1	35N	17W		5	3,9
Josephine Lower No. 9	13A14	4900	22	35N	16W		5	3,9
Mount Allan No. 7	13A07	5700	27	35N	16W		5	3,9
Pitegan Pass No. 6	13A06	5500	27	35N	16W		5	3,9
Ptarmigan No. 8	13A08	5800	36	36N	17W		5	3,9

MISSOURI RIVER BASIN

BEAVERHEAD RIVER

Drainage Basin & Snow Course	Number	Elev.	Sec.	Twp.	Range	Sensors in Addition to Snow Courses 1/	Measuring Dates 2/	Meas. By 3/
Bloody Dick	13D10	7600	12	8S	16W		3,4,5	1
Carter Creek	12D04	7400	22	8S	7W		2,3,4	11
Christensen Ranch	12D06	6000	34	7S	7W	P,NSC	Monthly	11
Dad Creek Lake	13E22	8400	24	12S	13W		3,4,5	1
Elk Horn Springs	13D15	7800	21	4S	12W		3,4,5	3
Gold Stone	13D09	8100	11	8S	16W		3,4,5	1
Lakeview	11E13	6700	23	14S	2W	M,NSC	Monthly	10
Lakeview Canyon	11E06	6930	26	14S	2W		1,2,3,4,5	10
Lakeview Ridge	11E03	7400	27	14S	2W		1,2,3,4,5	10
Lemhi Pass	13E01	7480	9	10S	15W		3,4	1
Lemhi Ridge	13E23	8100	4	10S	15W	P	3,4	1
Trail Creek	13E02	7090	15	10S	15W		3,4	1
White Pine Ridge	12E01	8850	18	14S	9W		3,4,5	1

RUBY RIVER

Branham Lakes	11D14	8850	5	4S	3W		3,4,5	1,12
Clover Meadow	11D08	8600	28	3S	2W		3,4,5	1
Olvide	12E07	7800	14	12S	4W		3,4,5	1
Middle Mill Creek	11D15	7850	17	4S	3W		3,4,5	1,12
Notch	12E06	8500	18	11S	4W		3,4,5	1
Smuggler Mine	12D05	6960	24	4S	4W		3,4,5	1,12

BIG HOLE RIVER

Abundance Lake	13D20	8800	7	3S	11W		3,4,5	1
Bull Mountain	12D08	7500	3	1N	10W		1,2,3,4,5	2
Calvert Creek	13D26	6450	34	2N	14W	P	3,4,5	1
Darkhorse Lake	13D19	8600	4	8S	16W		3,4,5	1
Fleecer Ridge	12D07	6600	18	2N	9W		1,2,3,4,5	2
Foolhen	13D21	8280	11	1S	13W		3,4,5	1
Jahnke Lake Trail	13D27	7200	24	7S	16W		3,4,5	1
Mudd Lake	13D25	7650	24	2N	15W		3,4,5	1
Palisade Creek	13D23	8250	3	2N	15W		4,5	1
Slag-A-Melt Lake	13D24	8750	29	5S	17W		3,4,5	1

JEFFERSON RIVER

Berry Meadow	12C07	7000	8	5N	5W		3,4	1
Copper Mountain	12C09	7700	13	3N	7W		2,3,4,5,5½	4
Nez Perce Creek	12C10	6500	16	4N	6W		2,3,4,5	4
Picnic Grounds	12C06	6500	21	5N	6W		2,3,4	4
Pipestone Pass	12D01	7200	10	1N	7W		1,2,3,4,5	4
Rocker Peak	12C11	8000	17	7N	5W	S,P	1,2,3,4,5	1

MADISON RIVER

Black Bear	11E35	7950	27	15S	5E	S,P	1,2,3,4,5,5½,6	1,2
Call Road	11D07	8050	21	8S	2W		3,4,5	1
Four Mile	11D12	6900	5	4S	2W	P	3,4,5	1
Hebgen Dam	11E05	6550	22	11S	3E		1,2,3,4,5	3
Jack Creek	11D05	7500	13	6S	1E		3,4	1
Lake Creek	11E22	6100	27	11S	1E		2,3,4,5	1,2
Lower Twin	11D11	7900	12	4S	3W		3,4,5	1
Madison Plateau	11E31	7750	28	14S	5E	S,P	1,2,3,4,5,5½,6	1,2
North Meadow	11D03	7500	24	3S	3W		3,4,5	1
Potomageton Park	11E21	7150	33	10S	3E		3,4,5	2
Sentinel Creek	11E20	8300	17	10S	3E		3,4,5	2
Tepee Creek	11E24	8000	15	12S	1W	S	2,3,4,5	1,2
West Yellowstone	11E07	6700	34	13S	5E	M	1,2,3,4,5	1,3,6
Whiskey Creek	11E30	6800	19	14S	5E	S,P	1,2,3,4,5,5½,6	2

GALLATIN RIVER

Arch Falls	10D14	7350	3	5S	6E		1,2,3,4,5,5½,6	1
Bear Basin	11D09	8150	9	6S	3E		3,4,5	1
Big Sky	11D17	7700	30	6S	3E	P	1,2,3,4,5	1
Bridger Bowl	10D15	7250	25	1N	6E	S,P,M	1,2,3,4,5,5½,6	1
Carrot Basin	11E29	9000	18	10S	4E	S	1,2,3,4,5	2
College Site	11D02	4856	18	2S	5E	M,NSC	Weekly	7
Davis Slide	10D04	8100	14	5S	6E		1,2,3,4,5,5½,6	1
Hood Meadow	10D03	6600	22	4S	6E		1,2,3,4,5,5½,6	1
Lick Creek	10D13	6860	10	4S	6E	S,P,M	1,2,3,4,5,5½,6	1
Little Park	11D10	7400	22	6S	3E		3,4,5	1
Maynard Creek	10D18	6210	19	1N	7E	S,P	1,2,3,4,5,5½,6	1
New World	10D01	6700	24	3S	6E		2,3,4	1
Shower Falls	10D16	8100	14	5S	6E	S,P	1,2,3,4,5,5½,6	1
Taylor Peaks	11D13	8500	26	9S	2E	S,P	4	1
Twenty-One Mile	11E06	7150	1	11S	5E	N	1,2,3,4,5	3

MISSOURI RIVER MAIN STEM

Big Coulee	10D03	5100	10	19N	9E		1,2,3,4,5	1,12
Boulder Mountain	11C01	7950	1	9N	3E		3,4,5	1
Cheesman Reservoir	12C05	6200	2	8N	5W		1,2,3,4,5	3
Deadman Creek	10C09	6450	23	12N	8E	S,P	1,2,3,4,5,5½,6	1
Elk Park	10C07	8000	10	8N	8E		3,4,5	1
Frohner Meadows	12C13	6480	23	8N	5W	S,P	1,2,3,4,5	1
Grasshopper	10C02	7000	19	9S	8E		3,4,5	1
Highwood Divide	10S02	5650	16	19N	9E	P	1,2,3,4,5	1,12
Highwood Station	10S01	4600	20	20N	9E	P	1,2,3,4,5	1,12
Kings Hill	10C01	7500	34	13N	8E	M	3,4,5,5½,6	1,3
Stemple Pass	12C01	6600	16	13N	7W	M	3,4,5	1,3
Ten Mile Lower	12C02	6600	12	8N	6W		1,2,3,4,5	3
Ten Mile Middle	12C03	6800	13	8N	6W		1,2,3,4,5	3
Ten Mile Upper	12C04	8000	19	8N	5W		1,2,3,4,5	3

TETON - MARIAS RIVERS

Drainage Basin & Snow Course	Number	Elev.	Sec.	Twp.	Range	Sensors in Addition to Snow Courses 1/	Measuring Dates 2/	Meas. By 3/
Badger Pass	13A15	6900	4	27N	11W	A	1,2,3,4,5	1
Blue Lake	13A20	5900	25	28N	11W	A	1,2,3,4,5	1
Cabin Creek	12B06	5200	33	23N	10W		3,4,5	2
Five-Bull	12B09	5700	25	20N	10W		3,4,5	1
Freight Creek	12A01	6000	13	26N	10W		3,4,5	1
Goat Mountain	12B07	7000	20	22N	10W		3,4	2,3
Marias Pass	13A05	5250	31	30N	13W	M	1,2,3,4,5	3,6
Mount Lockhart	12B12	6400	18	25N	9W		1,2,3,4,5,5½,6	2
Waldron	12B13	5600	17	25N	9W		1,2,3,4,5,5½,6	2
Wrong Creek	12B04	5700	32	25N	10W		3,4,5	2
Wrong Ridge	12B03	6800	17	25N	10W		3,4,5	2

JUDITH RIVER

Avalanche	9C02	7100	24	12N	17E		3,4,5	1
Big Snowy	9C05	7150	25	12N	17E		3,4,5	1
Crystal Lake	9C01	6100	19	12N	18E		3,4,5	1
Rock Creek	9C03	5600	7	12N	18E		3,4,5	1
Spur Park	10C06	8100	20	12N	9E		1,2,3,4,5,5½,6	1
Wilcox Ranch	9C06	5300	17	13N	18E	P,NSC	Monthly	1

MUSSELSHELL RIVER

Dalar Peak	10C15	7600	34	11N	11E		3,4,5	2
Eagle Creek	10C13	7000	2	5N	10E		3,4,5	2
Forest Lake	10C14	6400	26	6N	10E		3,4,5	2
Haymaker	10C11	8050	16	11N	12E		3,4,5	2
Johnson Park	10C12	6450	16	10N	11E		3,4,5	2

MILK RIVER

Beaver Creek	9A05	3950	21	29N	16E	M,NSC	Monthly	1,7
Bear Paw Ski Area	9A02	5200	21	28N	16E	P	1,2,3,4,5	1,7
Boxelder Creek	9A08	5100	24	28N	16E	P	1,2,3,4,5	1,7
King Creek Saddle	8B02	4550	10	25N	24E		1,2,3,4,5	5
King Springs	8B03	4150	9	25N	24E		1,2,3,4,5	5
Kiwanis Camp	9A04	3720	9	29N	16E	P,M,T	1,2,3,4,5	1,7
Mission Mountain	8A01	5050	15	25N	24E	P	1,2,3,4,5	5
Rocky Boy	9A01	4700	22	28N	1W	S,P,M	1,2,3,4,5	1,
Sucker Creek	9A06	3960	11	29N	16E	P	1,2,3,4,5	1,
Taylor Road	9A07	4080	19	29N	16E	P	1,2,3,4,5	1,

UPPER YELLOWSTONE RIVER

Battle Ridge	10D11	8020	32	2S	7E		1,2,3,4,5	1
Bald Ridge	10C05	7500	11	4S	10E		3,4,5	1
Bota Sota	9D14	7350	35	2S	18E		3,4,5	1
Brass Monkey	10D29	9050	6	5S	14E	P,NSC	Seasonall	11
Camp Sarsfield	9D01	7890	2	6S	18E		3,4,5,5½,6	1
Cole Creek	9D14	7850	36	2S	19E	S,P	1,2,3,4,5,5½,6	1,2
Collov Creek	10D30	6300	36	6S	10E		3,4,5	1
Cooke Station	9D07	8150	19	9S	15E		1,2,3,4,5,5½,6	1,2
Crevice Mountain	10D05	8400	22	9S	9E		3,4	2
Flatiar Creek	9D06	9100	11	9S	14E	S,P	1,2,3,4,5,5½,6	1,2
Grizzly Peak	9D05	8400	26	7S	19E		1,2,3,4,5	1,
Independence	10D06	7850	21	7S	12E		3,4,5	1
Mill Creek	10D19	7500	6	7S	11E	P	3,4,5	2
Monument Peak	10D12	8800	16	7S	12E		3,4,5	1
Northeast Entrance	10D07	7400	33	9S	14E	S,P,M	1,2,3,4,5,5½,6	1,6
Picket Pin Lower	9D13	6200	1	5S	14E	P	1,2,3,4,5	13
Picket Pin Middle	9D12	7250	1	5S	14E		1,2,3,4,5	13
Picket Pin Upper	10D28	8100	32	4S	14E	P	1,2,3,4,5	13
PNC Parland	8D02	3700	35	8S	23E	M,NSC	Monthly	1
PNC Headquarters	8D01	3656	34	8S	23E	P,M,I,NSC	Daily	1
Porcupine R. S.	10C03	6500	10	4N	10E		3,4,5	1
Sacajawea	10D10	6550	36	2N	6E		3,4,5	1
Silver Run	9D18	6630	11	8S	19E		3,4,5	1
South Fork Shields	10C08	8100	13	4N	10E		3,4,5	1
Timberline Creek	9D04	8850	10	8S	18E		3,4,5,5½,6	1
West Rosebud	9D02	7500	9	7S	16E		3,4	4
White Mill	9D08	8700	18	9S	15E	S,P	3,4,5,5½,6	1,2
Willow Creek	9D17	6500	31	7S	20E		1,2,3,4,5	1,

LEGEND

1/ Blank refers to snow course only at site
S = snow pillow also
P = precipitation gage also
M = soil moisture gage also
T = max-min temperature also
W = wind run also
A = aerial marker also
NSC = no snow course at site

2/ Numerals 1,2,3,4,5,5½,6 refer to snow course or aerial marker measurements on January 1, February 1, March 1, April 1, May 1, May 15, and June 1. Most snow pillows, temperature, and wind run are daily readings, most precipitation gages and soil moisture are read monthly.

3/ Numerals refer to agency making the snow surveys as follows:

1. Soil Conservation Service
2. Forest Service
3. Geological Survey
4. Montana Power Company
5. Bureau of Indian Affairs
6. National Park Service
7. MSU Agricultural Experiment Station
8. University of Montana School of Forestry
9. Department of Energy, Mines and Resources
10. Bureau of Sports Fisheries and Wildlife
11. Private Cooperator
12. Montana Association of Conservation Districts
13. Montana Department of Fish and Game

Agencies and Organizations Cooperating in Montana Snow Surveys

GOVERNMENT AGENCIES

Canada:

Water Survey of Canada, Calgary, Department of the Environment
Water Resources Service, Department of Lands, Forests and Water Resources, British Columbia

Federal:

Department of the Army
Corps of Engineers
U.S. Department of Agriculture
Forest Service
Soil Conservation Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of the Interior
Bonneville Power Administration
Bureau of Indian Affairs
Bureau of Reclamation
Fish an Wildlife Service
Geological Survey
National Park Service

STATE

Montana Association of Conservation Districts
Montana Department of Fish and Game
Montana Department of Natural Resources and Conservation
Montana State University - Agricultural Experiment Station
North Montana Branch Station - Agricultural Experiment Station
University of Montana - School of Forestry

PRIVATE

Montana Power Company

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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